

Account Opening Instructions – Ironbeam, Inc.

Ironbeam, Inc. relies on the information provided in this application to verify the customer(s) identity. The following is a list of instructions on how to complete the account application forms for your new commodity trading account.

- 1. Read and sign the Risk Disclosure Statement CFTC Regulation 1.55(b) and the Risk Disclosure Statement for Futures and Options. Also, complete the Risk Disclosure Statement for Security Futures Contracts if you intend on trading SFPs.
- 2. Read and retain a copy of the Risk Disclosure Acknowledgements, Privacy Policy and Material Conflicts of Interest Disclosure.
- 3. Read and sign the required documentation listed below in **SECTION 1**, providing any required supporting documentation by account type.*
- 4. If applicable, read and sign the required documents listed below in SECTION 2.
- 5. Read and sign the applicable tax form listed below in **SECTION 3**.
- * <u>General and Limited Partnerships</u> must supply partnership documents, any other formation documents, individual applications completed for all General Partners with 10% or greater ownership, and a current list of authorized signatories/traders. Each General Partner must sign all applicable disclosures and account paperwork.
- * <u>Trust Accounts</u> must supply executed trust documents, any other formation documents, individual applications completed for all 10% or greater owners of the trust and if applicable, beneficiaries of the trust. Each owner must sign all applicable disclosure and account paperwork.
- * <u>IRA or Keogh Plans and Pension or Profit Sharing Trusts or Plans</u> must supply their own agreements, individual applications completed for all 10% or greater owners. Each owner must sign all applicable disclosures and account paperwork.

Any questions on completing these documents should be directed to your Ironbeam Account Executive and/or to Ironbeam New Accounts.

READ AND RETAIN

Risk Disclosure Statement – CFTC Regulation 1.55(b) (All customers must sign)	Page 5-6
Risk Disclosure Statement for Futures and Options (All customers must sign)	Page 7-9
Risk Disclosure Statement for Security Futures Contracts	Page 10-25
Ironbeam, Inc. Privacy Policy	Page 26
Ironbeam, Inc. Material Conflicts of Interest Disclosure	Page 27
Ironbeam, Inc. Disclosure Document	Page 28-34

SECTION 1: Complete All Forms

Account ApplicationPage 36-41Customer AgreementPage 42-50Electronic Trading and Order Routing System Disclosure StatementPage 51Introducing Broker AuthorizationPage 52

In accordance with U.S. Federal and industry rules and regulations, when opening an account with Ironbeam, Inc., all authorized traders, non-U.S. applicant signers, and non-U.S. beneficial owners must provide one of the following forms of identification: A copy of your Passport, Driver's License or Government Issued Identification Card. If the identification card does not provide an address, then please provide a copy of a recent utility bill, current lease or mortgage documents showing proof of current address. Further, all authorized traders must fill out an individual application in conjunction with an entity application.

Account Opening Instructions – Ironbeam, Inc. (Continued)

SECTION 2:

To be completed: if applicable, or if required by Ironbeam, Inc.

Partnership Authorization (required for all general and limited partnerships)	Page 54
Personal Guarantee Agreement (required for all applicable applications)	Page 55
Account Transfer Authorization Form (if you are transferring your account from another FCM)	Page 56
Additional Account Authorization (if you wish to open an additional account with Ironbeam)	Page 57
Hedge Agreement (if you are opening a hedge account)	Page 58
Additional Risk Disclosure (required to be signed by all owners if one owner triggers requirement)	Page 59
Discretionary (POA) Account Agreement (if you have 3 rd party discretion over your account)	Page 60
Authorization to Remit Funds (if you are authorizing Ironbeam to pay CTA fees from your account)	Page 61
Managed Account Controller Statement and Customer Acknowledgement	Page 62
(if your account is managed by an unregistered 3 rd party)	
Notice to Foreign Brokers and Foreign Traders (required for all non-U.S. account holders)	Page 63
CME Non-Professional Self-Certification Form (Complete if you qualify as a non-professional trader)	Page 64-65

SECTION 3:

Internal Revenue Service Forms

Internal Revenue Service (IRS) Tax Forms Instruction Guide

Page 67

<u>U.S. Applicants:</u> IRS Form W-9. (*Each U.S. applicant must complete IRS Form W-9 Certification*)

Non-U.S. Applicants: Sign one of the following: IRS Form W-8BEN, IRS Form W-8ECI, IRS Form W-8 EXP, IRS Form W-81MY (See www.irs.gov for details and instructions on filling out the previous forms if they apply to you)

All non-U.S. Applicants must also sign in SECTION 2 the Notice to Foreign Brokers and Foreign Traders.

Ironbeam, Inc. Account Funding Instructions

NOTE: DO NOT SEND FUNDS PRIOR TO SUBMITTING IRONBEAM'S ENTIRE APPLICATION AND APPLICABLE RISK DISCLOSURES.

CHECKS:

- Please make all checks payable to **IRONBEAM**, **INC**.
- Checks without the customer's name on it will <u>not</u> be accepted.
- Third party checks will <u>not</u> be accepted.
- Please note: the name on the check must match the name on the customer's Ironbeam, Inc. account.
- Ironbeam, Inc. reserves the right to place a hold on trading in accounts funded by check.

Deliver all checks to:

Ironbeam, Inc.

Attn: New Accounts

141 W. Jackson Blvd., Suite 2600

Chicago, IL 60604

WIRES:

- Third party wires will <u>not</u> be accepted.
- Account name must match between bank account and the name on customer's Ironbeam, Inc. account.

Wire to:

BMO Harris Bank, N.A. Chicago, Illinois

ABA#: 071-000-288

For foreign wires, please instruct your bank to use the following:

SWIFT CODE: HATRUS44 Credit to: Ironbeam, Inc. Customer Segregated Funds Account Number: 3031226

For further credit to: (Your name and Ironbeam account number, if assigned)

ACCOUNT TRANSFER:

- If you are transferring your account from another firm to Ironbeam, Inc., please read and sign the Account Transfer Authorization Form on **Page 49** and provide a copy of your most recent daily statement from the firm you are transferring from.

Note: Ironbeam, Inc. does not accept cash, credit card, virtual currency provider, money order, or third-party check or wire funding.

COMPLETED DOCUMENTS:

Once you have completed the account forms, you may return the entire booklet (including unsigned pages) to:

Ironbeam, Inc.
Attn: New Accounts
141 W. Jackson Blvd., Suite 2600
Chicago, IL 60604

Ironbeam, Inc. may also accept a scanned or printed copy of the application (including unsigned pages) via:

E-Mail: newaccounts@ironbeam.com or

Fax: +1 312.765.7201

RISK DISCLOSURE STATEMENT

The risk of loss in trading commodity futures contracts can be substantial. You should, therefore, carefully consider whether such trading is suitable for you in light of your circumstances and financial resources. You should be aware of the following points:

- (1) You may sustain a total loss of the funds that you deposit with your broker to establish or maintain a position in the commodity futures market, and you may incur losses beyond these amounts. If the market moves against your position, you may be called upon by your broker to deposit a substantial amount of additional margin funds, on short notice, in order to maintain your position. If you do not provide the required funds within the time required by your broker, your position may be liquidated at a loss, and you will be liable for any resulting deficit in your account.
- (2) The funds you deposit with a futures commission merchant for trading futures positions are not protected by insurance in the event of the bankruptcy or insolvency of the futures commission merchant, or in the event your funds are misappropriated.
- (3) The funds you deposit with a futures commission merchant for trading futures positions are not protected by the Securities Investor Protection Corporation even if the futures commission merchant is registered with the Securities and Exchange Commission as a broker or dealer.
- (4) The funds you deposit with a futures commission merchant are generally not guaranteed or insured by a derivatives clearing organization in the event of the bankruptcy or insolvency of the futures commission merchant, or if the futures commission merchant is otherwise unable to refund your funds. Certain derivatives clearing organizations, however, may have programs that provide limited insurance to customers. You should inquire of your futures commission merchant whether your funds will be insured by a derivatives clearing organization and you should understand the benefits and limitations of such insurance programs.
- (5) The funds you deposit with a futures commission merchant are not held by the futures commission merchant in a separate account for your individual benefit. Futures commission merchants commingle the funds received from customers in one or more accounts and you may be exposed to losses incurred by other customers if the futures commission merchant does not have sufficient capital to cover such other customers' trading losses.
- (6) The funds you deposit with a futures commission merchant may be invested by the futures commission merchant in certain types of financial instruments that have been approved by the Commission for the purpose of such investments. Permitted investments are listed in Commission Regulation 1.25 and include: U.S. government securities; municipal securities; money market mutual funds; and certain corporate notes and bonds. The futures commission merchant may retain the interest and other earnings realized from its investment of customer funds. You should be familiar with the types of financial instruments that a futures commission merchant may invest customer funds in.
- (7) Futures commission merchants are permitted to deposit customer funds with affiliated entities, such as affiliated banks, securities brokers or dealers, or foreign brokers. You should inquire as to whether your futures commission merchant deposits funds with affiliates and assess whether such deposits by the futures commission merchant with its affiliates increases the risks to your funds.
- (8) You should consult your futures commission merchant concerning the nature of the protections available to safeguard funds or property deposited for your account.
- (9) Under certain market conditions, you may find it difficult or impossible to liquidate a position. This can occur, for example, when the market reaches a daily price fluctuation limit ("limit move").
- (10) All futures positions involve risk, and a "spread" position may not be less risky than an outright "long" or "short" position.
- (11) The high degree of leverage (gearing) that is often obtainable in futures trading because of the small margin requirements can work against you as well as for you. Leverage (gearing) can lead to large losses as well as gains.

RISK DISCLOSURE STATEMENT

(12) In addition to the risks noted in the paragraphs enumerated above, you should be familiar with the futures commission merchant you select to entrust your funds for trading futures positions. The Commodity Futures Trading Commission requires each futures commission merchant to make publicly available on its Web site firm specific disclosures and financial information to assist you with your assessment and selection of a futures commission merchant. Information regarding this futures commission merchant may be obtained by visiting our Web site, www.ironbeam.com.

ALL OF THE POINTS NOTED ABOVE APPLY TO ALL FUTURES TRADING WHETHER FOREIGN OR DOMESTIC. IN ADDITION, IF YOU ARE CONTEMPLATING TRADING FOREIGN FUTURES OR OPTIONS CONTRACTS, YOU SHOULD BE AWARE OF THE FOLLOWING ADDITIONAL RISKS:

(13) Foreign futures transactions involve executing and clearing trades on a foreign exchange. This is the case even if the foreign exchange is formally "linked" to a domestic exchange, whereby a trade executed on one exchange liquidates or establishes a position on the other exchange. No domestic organization regulates the activities of a foreign exchange, including the execution, delivery, and clearing of transactions on such an exchange, and no domestic regulator has the power to compel enforcement of the rules of the foreign exchange or the laws of the foreign country. Moreover, such laws or regulations will vary depending on the foreign country in which the transaction occurs. For these reasons, customers who trade on foreign exchanges may not be afforded certain of the protections which apply to domestic transactions, including the right to use domestic alternative dispute resolution procedures. In particular, funds received from customers to margin foreign futures transactions may not be provided the same protections as funds received to margin futures transactions on domestic exchanges. Before you trade, you should familiarize yourself with the foreign rules which will apply to your particular transaction.

(14) Finally, you should be aware that the price of any foreign futures or option contract and, therefore, the potential profit and loss resulting therefrom, may be affected by any fluctuation in the foreign exchange rate between the time the order is placed and the foreign futures contract is liquidated or the foreign option contract is liquidated or exercised.

THIS BRIEF STATEMENT CANNOT, OF COURSE, DISCLOSE ALL THE RISKS AND OTHER ASPECTS OF THE COMMODITY MARKETS.

I hereby acknowledge that I have received and understood this risk disclosure statement.

Signature 1		Signature 2
Х		x
Print Name	•	Print Name
Date	•	Date

RISK DISCLOSURE STATEMENT FOR FUTURES AND OPTIONS

THIS BRIEF STATEMENT DOES NOT DISCLOSE ALL OF THE RISKS AND OTHER SIGNIFICANT ASPECTS OF TRADING IN FUTURES AND OPTIONS. IN LIGHT OF THE RISKS, YOU SHOULD UNDERTAKE SUCH TRANSACTIONS ONLY IF YOU UNDERSTAND THE NATURE OF THE CONTRACTS (AND CONTRACTUAL RELATIONSHIPS) INTO WHICH YOU ARE ENTERING AND THE EXTENT OF YOUR EXPOSURE TO RISK. TRADING IN FUTURES AND OPTIONS IS NOT SUITABLE FOR MANY MEMBERS OF THE PUBLIC. YOU SHOULD CAREFULLY CONSIDER WHETHER **TRADING** APPROPRIATE FOR YOU IN LIGHT OF YOUR EXPERIENCE, OBJECTIVES, FINANCIAL RESOURCES AND OTHER RELEVANT CIRCUMSTANCES.

FUTURES

1. EFFECT OF "LEVERAGE" OR "GEARING"

TRANSACTIONS IN FUTURES CARRY A HIGH DEGREE OF RISK. THE AMOUNT OF INITIAL MARGIN IS SMALL RELATIVE TO THE VALUE OF THE FUTURES CONTRACT, SO THAT TRANSACTIONS ARE "LEVERAGED" OR "GEARED". A RELATIVELY SMALL MARKET MOVEMENT WILL HAVE A PROPORTIONALLY LARGER IMPACT ON THE FUNDS YOU HAVE DEPOSITED OR WILL HAVE TO DEPOSIT: THIS MAY WORK AGAINST YOU AS WELL AS FOR YOU. YOU MAY SUSTAIN A TOTAL LOSS OF THE INITIAL MARGIN FUNDS AND ANY ADDITIONAL FUNDS DEPOSITED WITH THE FIRM TO MAINTAIN YOUR POSITION. IF THE MARKET MOVES AGAINST YOUR POSITION OR MARGIN LEVELS ARE INCREASED, YOU MAY BE CALLED UPON TO PAY SUBSTANTIAL ADDITIONAL FUNDS ON SHORT NOTICE TO MAINTAIN YOUR POSITION. IF YOU FAIL TO COMPLY WITH A REQUEST FOR ADDITIONAL FUNDS WITHIN THE TIME PRESCRIBED, YOUR POSITION MAY BE LIQUIDATED AT A LOSS AND YOU WILL BE LIABLE FOR ANY RESULTING DEFICIT.

2. RISK-REDUCING ORDERS OR STRATEGIES

THE PLACING OF CERTAIN ORDERS (E.G. "STOP-LOSS" ORDERS, WHERE PERMITTED UNDER LOCAL LAW, OR "STOP-LIMIT" ORDERS) WHICH ARE INTENDED TO LIMIT LOSSES TO CERTAIN AMOUNTS MAY NOT BE EFFECTIVE BECAUSE MARKET CONDITIONS MAY MAKE IT IMPOSSIBLE TO EXECUTE SUCH ORDERS. STRATEGIES USING COMBINATIONS OF POSITIONS, SUCH AS "SPREAD" AND "STRADDLE" POSITIONS MAY BE AS RISKY AS TAKING SIMPLE "LONG" OR "SHORT" POSITIONS.

OPTIONS

3. VARIABLE DEGREE OF RISK

TRANSACTIONS IN OPTIONS CARRY A HIGH DEGREE OF

RISK. PURCHASERS AND SELLERS OF OPTIONS SHOULD FAMILIARIZE THEMSELVES WITH THE TYPE OF OPTION (I.E. PUT OR CALL) WHICH THEY CONTEMPLATE TRADING AND THE ASSOCIATED RISKS. YOU SHOULD CALCULATE THE EXTENT TO WHICH THE VALUE OF THE OPTIONS MUST INCREASE FOR YOUR POSITION TO BECOME PROFITABLE, TAKING INTO ACCOUNT THE PREMIUM AND ALL TRANSACTION COSTS.

THE PURCHASER OF OPTIONS MAY OFFSET OR EXERCISE THE OPTIONS OR ALLOW THE OPTIONS TO EXPIRE. THE EXERCISE OF AN OPTION RESULTS EITHER IN A CASH SETTLEMENT OR IN THE PURCHASER ACQUIRING OR DELIVERING THE UNDERLYING INTEREST. IF THE OPTION IS ON A FUTURE, THE PURCHASER WILL ACQUIRE A FUTURES POSITION WITH ASSOCIATED LIABILITIES FOR MARGIN (SEE THE SECTION ON FUTURES ABOVE). IF THE PURCHASED OPTIONS EXPIRE WORTHLESS, YOU WILL SUFFER A TOTAL LOSS OF YOUR INVESTMENT WHICH WILL CONSIST OF THE OPTION PREMIUM PLUS TRANSACTION COSTS. IF YOU ARE CONTEMPLATING PURCHASING DEEP-OUT-OF-THE-MONEY OPTIONS, YOU SHOULD BE AWARE THAT THE CHANCE OF SUCH OPTIONS BECOMING PROFITABLE ORDINARILY IS REMOTE.

SELLING ("WRITING" OR "GRANTING") AN OPTION GENERALLY ENTAILS CONSIDERABLY GREATER RISK THAN PURCHASING OPTIONS. ALTHOUGH THE PREMIUM RECEIVED BY THE SELLER IS FIXED, THE SELLER MAY SUSTAIN A LOSS WELL IN EXCESS OF THAT AMOUNT. THE SELLER WILL BE LIABLE FOR ADDITIONAL MARGIN TO MAINTAIN THE POSITION IF THE MARKET MOVES UNFAVORABLY. THE SELLER WILL ALSO BE EXPOSED TO THE RISK OF THE PURCHASER EXERCISING THE OPTION AND THE SELLER WILL BE OBLIGATED TO EITHER SETTLE THE OPTION IN CASH OR TO ACQUIRE OR DELIVER THE UNDERLYING INTEREST. IF THE OPTION IS ON A FUTURE, THE SELLER WILL ACQUIRE A POSITION IN A FUTURE WITH ASSOCIATED LIABILITIES FOR MARGIN (SEE THE SECTION ON FUTURES ABOVE). IF THE OPTION IS "COVERED" BY THE SELLER HOLDING A CORRESPONDING POSTION IN THE UNDERLYING INTEREST OR A FUTURE OR ANOTHER OPTION, THE RISK MAY BE REDUCED. IF THE OPTION IS NOT COVERED, THE RISK OF LOSS CAN BE UNLIMITED.

CERTAIN EXCHANGES IN SOME JURISDICTIONS PERMIT DEFERRED PAYMENT OF THE OPTION PREMIUM, EXPOSING THE PURCHASER TO LIABILITY FOR MARGIN PAYMENTS NOT EXCEEDING THE AMOUNT OF THE PREMIUM. THE PURCHASER IS STILL SUBJECT TO THE RISK OF LOSING THE PREMIUM AND TRANSACTION COSTS. WHEN THE OPTION IS EXERCISED OR EXPIRES, THE PURCHASER IS RESPONSIBLE FOR ANY UNPAID PREMIUM OUTSTANDING AT THAT TIME.

ADDITIONAL RISKS COMMON TO FUTURES AND OPTIONS

RISK DISCLOSURE STATEMENT FOR FUTURES AND OPTIONS

4. TERMS AND CONDITIONS OF CONTRACTS

YOU SHOULD ASK THE FIRM WITH WHICH YOU DEAL ABOUT THE TERMS AND CONDITIONS OF THE SPECIFIC FUTURES OR OPTIONS WHICH YOU ARE TRADING AND ASSOCIATED OBLIGATIONS (E.G. THE CIRCUMSTANCES UNDER WHICH YOU MAY BECOME OBLIGATED TO MAKE OR TAKE DELIVERY ON THE UNDERLYING INTEREST OF A FUTURES CONTRACT AND, IN RESPECT OF OPTIONS, EXPIRATION DATES AND RESTRICTIONS ON THE TIME FOR EXERCISE). UNDER CERTAIN CIRCUMSTANCES, THE SPECIFICATIONS OF OUTSTANDING CONTRACTS (INCLUDING THE EXERCISE PRICE OF AN OPTION) MAY BE MODIFIED BY THE EXCHANGE OR CLEARING HOUSE TO REFLECT CHANGES IN THE UNDERLYING INTEREST.

5. SUSPENSION OR RESTRICTION OF TRADING AND PRICING RELATIONSHIPS

MARKET CONDITIONS (E.G. ILLIQUIDITY) AND/OR THE OPERATION OF THE RULES OF CERTAIN MARKETS (E.G. THE SUSPENSION OF TRADING IN ANY CONTRACT OR CONTRACT MONTH BECAUSE OF PRICE LIMITS OR "CIRCUIT BREAKERS") MAY INCREASE THE RISK OF LOSS BY MAKING IT DIFFICULT OR IMPOSSIBLE TO EFFECT TRANSACTIONS OR LIQUIDATE/OFFSET POSITIONS. IF YOU HAVE SOLD OPTIONS, THIS MAY INCREASE THE RISK OF LOSS.

FURTHER, NORMAL PRICING RELATIONSHIPS BETWEEN THE UNDERLYING INTEREST AND THE FUTURE, AND THE UNDERLYING INTEREST AND THE OPTION MAY NOT EXIST. THIS CAN OCCUR WHEN, FOR EXAMPLE, THE FUTURES CONTRACT UNDERLYING THE OPTION IS SUBJECT TO PRICE LIMITS WHILE THE OPTION IS NOT. THE ABSENCE OF AN UNDERLYING REFERENCE PRICE MAY MAKE IT DIFFICULT TO JUDGE "FAIR" VALUE.

6. DEPOSITED CASH AND PROPERTY

YOU SHOULD FAMILIARIZE YOURSELF WITH THE PROTECTIONS ACCORDED MONEY OR OTHER PROPERTY YOU DEPOSIT FOR DOMESTIC AND FOREIGN TRANSACTIONS, PARTICULARLY IN THE EVENT OF A FIRM INSOLVENCY OR BANKRUPTCY. THE EXTENT TO WHICH YOU MAY RECOVER YOUR MONEY OR PROPERTY MAY BE GOVERNED BY SPECIFIC LEGISLATION OR LOCAL RULES. IN SOME JURISDICTIONS, PROPERTY WHICH HAD BEEN SPECIFICALLY IDENTIFIABLE AS YOUR OWN WILL BE PRORATED IN THE SAME MANNER AS CASH FOR PURPOSES OF DISTRIBUTION IN THE EVENT OF A SHORTFALL.

7. COMMISSIONS AND OTHER CHARGES

BEFORE YOU BEGIN TO TRADE, YOU SHOULD OBTAIN A

CLEAR EXPLANATION OF ALL COMMISSION, FEES, AND OTHER CHARGES FOR WHICH YOU WILL BE LIABLE. THESE CHARGES WILL AFFECT YOUR NET PROFIT (IF ANY) OR INCREASE YOUR LOSS.

8. TRANSACTIONS IN OTHER JURISDICTIONS

TRANSACTIONS ON MARKETS IN OTHER JURISDICTIONS, INCLUDING MARKETS FORMALLY LINKED TO A DOMESTIC MARKET, MAY EXPOSE YOU TO ADDITIONAL RISK. SUCH MARKETS MAY BE SUBJECT TO REGULATION WHICH MAY OFFER DIFFERENT OR DIMINISHED **INVESTOR** PROTECTION. BEFORE YOU TRADE YOU SHOULD ENQUIRE ABOUT ANY RULES RELEVANT TO YOUR PARTICULAR TRANSACTIONS. YOUR LOCAL REGULATORY AUTHORITY WILL BE UNABLE TO COMPEL THE ENFORCEMENT OF THE RULES OF REGULATORY AUTHORITIES OR MARKETS IN OTHER JURISDICTIONS WHERE YOUR TRANSACTIONS HAVE BEEN EFFECTED. YOU SHOULD ASK THE FIRM WITH WHICH YOU DEAL FOR DETAILS ABOUT THE TYPES OF REDRESS AVAILABLE IN BOTH YOUR HOME JURISDICTION AND OTHER RELEVANT JURISDICTIONS BEFORE YOU START TO TRADE.

9. CURRENCY RISKS

THE PROFIT OR LOSS IN TRANSACTIONS IN FOREIGN CURRENCY-DENOMINATED CONTRACTS (WHETHER THEY ARE TRADED IN YOUR OWN OR ANOTHER JURISDICTION) WILL BE AFFECTED BY FLUCTUATIONS IN CURRENCY RATES WHERE THERE IS A NEED TO CONVERT FROM THE CURRENCY DENOMINATION OF THE CONTRACT TO ANOTHER CURRENCY.

10. TRADING FACILITIES

MOST OPEN-OUTCRY AND ELECTRONIC TRADING FACILITIES ARE SUPPORTED BY COMPUTER-BASED COMPONENT SYSTEMS FOR THE ORDER-ROUTING, EXECUTION, MATCHING, REGISTRATION OR CLEARING OF TRADES. AS WITH ALL FACILITIES AND SYSTEMS, THEY ARE VULNERABLE TO TEMPORARY DISRUPTION OR FAILURE. YOUR ABILITY TO RECOVER CERTAIN LOSSES MAY BE SUBJECT TO LIMITS ON LIABILITY IMPOSED BY THE SYSTEM PROVIDER, THE MARKET, THE CLEARING HOUSE AND/OR MEMBER FIRMS. SUCH LIMITS MAY VARY: YOU SHOULD ASK THE FIRM WITH WHICH YOU DEAL FOR DETAILS IN THIS RESPECT.

11. ELECTRONIC TRADING

TRADING ON AN ELECTRONIC TRADING SYSTEM MAY DIFFER NOT ONLY FROM TRADING IN AN OPEN-OUTCRY MARKET BUT ALSO FROM TRADING ON OTHER ELECTRONIC TRADING SYSTEMS. IF YOU UNDERTAKE

RISK DISCLOSURE STATEMENT FOR FUTURES AND OPTIONS

TRANSACTIONS ON AN ELECTRONIC TRADING SYSTEM, YOU WILL BE EXPOSED TO RISKS ASSOCIATED WITH THE SYSTEM, INCLUDING THE FAILURE OF HARDWARE AND SOFTWARE. THE RESULT OF ANY SYSTEM FAILURE MAY BE THAT YOUR ORDER IS EITHER NOT EXECUTED ACCORDING TO YOUR INSTRUCTIONS OR IS NOT EXECUTED AT ALL.

12. OFF-EXCHANGE TRANSACTIONS

IN SOME JURISDICTIONS, AND ONLY THEN IN RESTRICTED CIRCUMSTANCES, FIRMS ARE PERMITTED TO EFFECT OFF-EXCHANGE TRANSACTIONS. THE FIRM WITH WHICH YOU

DEAL MAY BE ACTING AS YOUR COUNTERPARTY TO THE TRANSACTION. IT MAY BE DIFFICULT OR IMPOSSIBLE TO LIQUIDATE AN EXISTING POSITION, TO ASSESS THE VALUE, TO DETERMINE A FAIR PRICE OR TO ASSESS THE EXPOSURE TO RISK. FOR THESE REASONS, THESE TRANSACTIONS MAY INVOLVE INCREASED RISKS. OFF-EXCHANGE TRANSACTIONS MAY BE LESS REGULATED OR SUBJECT TO A SEPARATE REGULATORY REGIME. BEFORE YOU UNDERTAKE SUCH TRANSACTIONS, YOU SHOULD FAMILIARIZE YOURSELF WITH APPLICABLE RULES AND ATTENDANT RISKS.

I HEREBY ACKNOWLEDGE THAT I HAVE RECEIVED AND UNDERSTOOD THIS RISK DISCLOSURE STATEMENT.

Signature 1	Signature 2	
Х	х	
Print Name	Print Name	
Date	Date	

This disclosure statement discusses the characteristics and risks of standardized security futures contracts traded on regulated U.S. exchanges. At present, regulated exchanges are authorized to list futures contracts on individual equity securities registered under the Securities Exchange Act of 1934 (including common stock and certain exchange-traded funds and American Depositary Receipts), as well as narrow-based security indices. Futures on other types of securities and options on security futures contracts may be authorized in the future. The glossary of terms appears at the end of the document.

Customers should be aware that the examples in this document are exclusive of fees and commissions that may decrease their net gains or increase their net losses. The examples also do not include tax consequences, which may differ for each customer.

Section 1 - Risks of Security Futures

1.1. Risks of Security Futures Transactions

Trading security futures contracts may not be suitable for all investors. You may lose a substantial amount of money in a very short period of time. The amount you may lose is potentially unlimited and can exceed the amount you originally deposit with your broker. This is because futures trading is highly leveraged, with a relatively small amount of money used to establish a position in assets having a much greater value. If you are uncomfortable with this level of risk, you should not trade security futures contracts.

1.2. General Risks

Trading security futures contracts involves risk and may result in potentially unlimited losses that are greater than the amount you deposited with your broker. As with any high risk financial product, you should not risk any funds that you cannot afford to lose, such as your retirement savings, medical and other emergency funds, funds set aside for purposes such as education or home ownership, proceeds from student loans or mortgages, or funds required to meet your living expenses.

Be cautious of claims that you can make large profits from trading security futures contracts. Although the high degree of leverage in security futures contracts can result in large and immediate gains, it can also result in large and immediate losses. As with any financial product, there is no such thing as a "sure winner."

Because of the leverage involved and the nature of security futures contract transactions, you may feel the effects of your losses immediately. Gains and losses in security futures contracts are credited or debited to your account, at a minimum, on a daily basis. If movements in the markets for security futures contracts or the underlying security decrease the value of your positions in security futures contracts, you may be required to have or make additional funds available to your carrying firm as margin. If your account is under the minimum margin requirements set by the exchange or the brokerage firm, your position may be liquidated at a loss, and you will be liable for the deficit, if any, in your account. Margin requirements are addressed in Section 4.

Under certain market conditions, it may be difficult or impossible to liquidate a position. Generally, you must enter into an offsetting transaction in order to liquidate a position in a security futures contract. If you cannot liquidate your position in a security futures contracts, you may not be able to realize a gain in the value of your position or prevent losses from mounting. This inability to liquidate could occur, for example, if trading is halted due to unusual trading activity in either the security futures contract or the underlying security; if trading is halted due to recent news events involving the issuer of the underlying security; if systems failures occur on an exchange or at the firm carrying your position; or if the position is on an illiquid market. Even if you can liquidate your position, you may be forced to do so at a price that involves a large loss.

Under certain market conditions, it may also be difficult or impossible to manage your risk from open security futures positions by entering into an equivalent but opposite position in another contract month, on another market, or in the underlying security. This inability to take positions to limit your risk could occur, for example, if trading is halted across markets due to unusual trading activity in the security futures contract or the underlying security or due to recent news events involving the issuer of the underlying security.

Under certain market conditions, the prices of security futures contracts may not maintain their customary or anticipated relationships to the prices of the underlying security or index. These pricing disparities could occur, for example, when the market for the security futures contract is illiquid, when the primary market for the underlying security is closed, or when the reporting of transactions in the underlying security has been delayed. For index products, it could also occur when trading is delayed or halted in some or all of the securities that make up the index.

You may be required to settle certain security futures contracts with physical delivery of the underlying security. If you hold your position in a physically settled security futures contract until the end of the last trading day prior to expiration, you will be obligated to make or take delivery of the underlying securities, which could involve additional costs. The actual settlement terms may vary from contract to contract and exchange to exchange. You should carefully review the settlement and delivery conditions before entering into a security futures contract. Settlement and delivery are discussed in Section 5.

You may experience losses due to systems failures. As with any financial transaction, you may experience losses if your orders for security futures contracts cannot be executed normally due to systems failures on a regulated exchange or at the brokerage firm carrying your position. Your losses may be greater if the brokerage firm carrying your position does not have adequate back-up systems or procedures.

All security futures contracts involve risk, and there is no trading strategy that can eliminate it. Strategies using combinations of positions, such as spreads, may be as risky as outright long or short positions. Trading in security futures contracts requires knowledge of both the securities and the futures markets.

Day trading strategies involving security futures contracts and other products pose special risks. As with any financial product, persons who seek to purchase and sell the same security future in the course of a day to profit from intra-day price movements ("day traders") face a number of special risks, including substantial commissions, exposure to leverage, and competition with professional traders. You should thoroughly understand these risks and have appropriate experience before engaging in day trading. The special risks for day traders are discussed more fully in Section 7.

Placing contingent orders, if permitted, such as "stop-loss" or "stop-limit" orders, will not necessarily limit your losses to the intended amount. Some regulated exchanges may permit you to enter into stop-loss or stop-limit orders for security futures contracts, which are intended to limit your exposure to losses due to market fluctuations. However, market conditions may make it impossible to execute the order or to get the stop price.

You should thoroughly read and understand the customer account agreement with your brokerage firm before entering into any transactions in security futures contracts.

You should thoroughly understand the regulatory protections available to your funds and positions in the event of the failure of your brokerage firm. The regulatory protections available to your funds and positions in the event of the failure of your brokerage firm may vary depending on, among other factors, the contract you are trading and whether you are trading through a securities account or a futures account. Firms that allow customers to trade security futures in either securities accounts or futures accounts, or both, are required to disclose to customers the differences in regulatory protections between such accounts, and, where appropriate, how customers may elect to trade in either type of account.

Section 2 - Description of a Security Futures Contract

2.1. What is a Security Futures Contract?

A security futures contract is a legally binding agreement between two parties to purchase or sell in the future a specific quantity of shares of a security or of the component securities of a narrow-based security index, at a certain price. A person who buys a security futures contract enters into a contract to purchase an underlying security and is said to be "long" the contract. A person who sells a security futures contract enters into a contract to sell the underlying security and is said to be "short" the contract. The price at which the contract trades (the "contract price") is determined by relative buying and selling interest on a regulated exchange.

In order to enter into a security futures contract, you must deposit funds with your brokerage firm equal to a specified percentage (usually at least 20 percent) of the current market value of the contract as a performance bond. Moreover, all security futures contracts are marked-to-market at least daily, usually after the close of trading, as described in Section 3 of this document. At that time, the account of each buyer and seller reflects the amount of any gain or loss on the security futures contract based on the contract price established at the end of the day for settlement purposes (the "daily settlement price").

An open position, either a long or short position, is closed or liquidated by entering into an offsetting transaction (i.e., an equal and opposite transaction to the one that opened the position) prior to the contract expiration. Traditionally, most futures contracts are liquidated prior to expiration through an offsetting transaction and, thus, holders do not incur a settlement obligation.

Examples:

Investor A is long one September XYZ Corp. futures contract. To liquidate the long position in the September XYZ Corp. futures contract, Investor A would sell an identical September XYZ Corp. contract.

Investor B is short one December XYZ Corp. futures contract. To liquidate the short position in the December XYZ Corp. futures contract, Investor B would buy an identical December XYZ Corp. contract.

Security futures contracts that are not liquidated prior to expiration must be settled in accordance with the terms of the contract. Some security futures contracts are settled by physical delivery of the underlying security. At the expiration of a security futures contract that is settled through physical delivery, a person who is long the contract must pay the final settlement price set by the regulated exchange or the clearing organization and take delivery of the underlying shares. Conversely, a person who is short the contract must make delivery of the underlying shares in exchange for the final settlement price.

Other security futures contracts are settled through cash settlement. In this case, the underlying security is not delivered. Instead, any positions in such security futures contracts that are open at the end of the last trading day are settled through a final cash payment based on a final settlement price determined by the exchange or clearing organization. Once this payment is made, neither party has any further obligations on the contract.

Physical delivery and cash settlement are discussed more fully in Section 5.

2.2. Purposes of Security Futures

Security futures contracts can be used for speculation, hedging, and risk management. Security futures contracts do not provide capital growth or income.

Speculation

Speculators are individuals or firms who seek to profit from anticipated increases or decreases in futures prices. A speculator who expects the price of the underlying instrument to increase will buy the security futures contract. A speculator who expects the price of the underlying instrument to decrease will sell the security futures contract. Speculation involves substantial risk and can lead to large losses as well as profits.

The most common trading strategies involving security futures contracts are buying with the hope of profiting from an anticipated price increase and selling with the hope of profiting from an anticipated price decrease. For example, a person who expects the price of XYZ stock to increase by March can buy a March XYZ security futures contract, and a person who expects the price of XYZ stock to decrease by March can sell a March XYZ security futures contract. The following illustrates potential profits and losses if Customer A purchases the security futures contract at \$50 a share and Customer B sells the same contract at \$50 a share (assuming 100 shares per contract).

Price of XYZ at Liquidation	Customer A Profit/Loss	Customer B Profit/Loss
\$55	\$500	- \$500
\$50	\$0	\$ 0
\$45	- \$500	\$500

Speculators may also enter into spreads with the hope of profiting from an expected change in price relationships. Spreaders may purchase a contract expiring in one contract month and sell another contract on the same underlying security expiring in a different month (e.g., buy June and sell September XYZ single stock futures). This is commonly referred to as a "calendar spread."

Spreaders may also purchase and sell the same contract month in two different but economically correlated security futures contracts. For example, if ABC and XYZ are both pharmaceutical companies and an individual believes that ABC will have stronger growth than XYZ between now and June, he could buy June ABC futures contracts and sell June XYZ futures contracts. Assuming that each contract is 100 shares, the following illustrates how this works.

Opening Position	Price at Liquidation	Gain or Loss	Price at Liquidation	Gain or Loss
Buy ABC at 50	\$53	\$300	\$53	\$300
Sell XYZ at 45	\$46	- \$100	\$50	- \$500
New Gain or Loss		\$200		- \$200

Speculators can also engage in arbitrage, which is similar to a spread except that the long and short positions occur on two different markets. An arbitrage position can be established by taking an economically opposite position in a security futures contract on another exchange, in an options contract, or in the underlying security.

Hedging

Generally speaking, hedging involves the purchase or sale of a security future to reduce or offset the risk of a position in the underlying security or group of securities (or a close economic equivalent). A hedger gives up the potential to profit from a favorable price change in the position being hedged in order to minimize the risk of loss from an adverse price change.

An investor who wants to lock in a price now for an anticipated sale of the underlying security at a later date can do so by hedging with security futures. For example, assume an investor owns 1,000 shares of ABC that have appreciated since he bought them. The investor would like to sell them at the current price of \$50 per share, but there are tax or other reasons for holding them until September. The investor could sell ten 100-share ABC futures contracts and then buy back those contracts in September when he sells the stock. Assuming the stock price and the futures price change by the same amount, the gain or loss in the stock will be offset by the loss or gain in the futures contracts.

Price in September	Value of 1,000 Shares of ABC	Gain or Loss on Futures	Effective Selling Price
\$40	\$40,000	\$10,000	\$50,000
\$50	\$50,000	\$0	\$50,000
\$60	\$60,000	- \$10,000	\$50,000

Hedging can also be used to lock in a price now for an anticipated purchase of the stock at a later date. For example, assume that in May a mutual fund expects to buy stocks in a particular industry with the proceeds of bonds that will mature in August. The mutual fund can hedge its risk that the stocks will increase in value between May and August by purchasing security futures contracts on a narrow-based index of stocks from that industry. When the mutual fund buys the stocks in August, it also will liquidate the security futures position in the index. If the relationship between the security futures contract and the stocks in the index is constant, the profit or loss from the futures contract will offset the price change in the stocks, and the mutual fund will have locked in the price that the stocks were selling at in May.

Although hedging mitigates risk, it does not eliminate all risk. For example, the relationship between the price of the security futures contract and the price of the underlying security traditionally tends to remain constant over time, but it can and does vary somewhat.

Furthermore, the expiration or liquidation of the security futures contract may not coincide with the exact time the hedger buys or sells the underlying stock. Therefore, hedging may not be a perfect protection against price risk.

Risk Management

Some institutions also use futures contracts to manage portfolio risks without necessarily intending to change the composition of their portfolio by buying or selling the underlying securities. The institution does so by taking a security futures position that is

opposite to some or all of its position in the underlying securities. This strategy involves more risk than a traditional hedge because it is not meant to be a substitute for an anticipated purchase or sale.

2.3. Where Security Futures Trade

By law, security futures contracts must trade on a regulated U.S. exchange. Each regulated U.S. exchange that trades security futures contracts is subject to joint regulation by the Securities and Exchange Commission (SEC) and the Commodity Futures Trading Commission (CFTC).

A person holding a position in a security futures contract who seeks to liquidate the position must do so either on the regulated exchange where the original trade took place or on another regulated exchange, if any, where a fungible security futures contract trades. (A person may also seek to manage the risk in that position by taking an opposite position in a comparable contract traded on another regulated exchange.)

Security futures contracts traded on one regulated exchange might not be fungible with security futures contracts traded on another regulated exchange for a variety of reasons. Security futures traded on different regulated exchanges may be non-fungible because they have different contract terms (e.g., size, settlement method), or because they are cleared through different clearing organizations. Moreover, a regulated exchange might not permit its security futures contracts to be offset or liquidated by an identical contract traded on another regulated exchange, even though they have the same contract terms and are cleared through the same clearing organization. You should consult your broker about the fungibility of the contract you are considering purchasing or selling, including which exchange(s), if any, on which it may be offset.

Regulated exchanges that trade security futures contracts are required by law to establish certain listing standards. Changes in the underlying security of a security futures contract may, in some cases, cause such contract to no longer meet the regulated exchange's listing standards. Each regulated exchange will have rules governing the continued trading of security futures contracts that no longer meet the exchange's listing standards. These rules may, for example, permit only liquidating trades in security futures contracts that no longer satisfy the listing standards.

2.4. How Security Futures Differ from the Underlying Security

Shares of common stock represent a fractional ownership interest in the issuer of that security. Ownership of securities confers various rights that are not present with positions in security futures contracts. For example, persons owning a share of common stock may be entitled to vote in matters affecting corporate governance. They also may be entitled to receive dividends and corporate disclosure, such as annual and quarterly reports.

The purchaser of a security futures contract, by contrast, has only a contract for future delivery of the underlying security. The purchaser of the security futures contract is not entitled to exercise any voting rights over the underlying security and is not entitled to any dividends that may be paid by the issuer. Moreover, the purchaser of a security futures contract does not receive the corporate disclosures that are received by shareholders of the underlying security, although such corporate disclosures must be made publicly available through the SEC's EDGAR system, which can be accessed at www.sec.gov. You should review such disclosures before entering into a security futures contract. See Section 9 for further discussion of the impact of corporate events on a security futures contract.

All security futures contracts are marked-to-market at least daily, usually after the close of trading, as described in Section 3 of this document. At that time, the account of each buyer and seller is credited with the amount of any gain, or debited by the amount of any loss, on the security futures contract, based on the contract price established at the end of the day for settlement purposes (the "daily settlement price"). By contrast, the purchaser or seller of the underlying instrument does not have the profit and loss from his or her investment credited or debited until the position in that instrument is closed out.

Naturally, as with any financial product, the value of the security futures contract and of the underlying security may fluctuate. However, owning the underlying security does not require an investor to settle his or her profits and losses daily. By contrast, as a result of the mark-to-market requirements discussed above, a person who is long a security futures contract often will be required to deposit additional funds into his or her account as the price of the security futures contract decreases. Similarly, a person who is short a security futures contract often will be required to deposit additional funds into his or her account as the price of the security futures contract increases.

Another significant difference is that security futures contracts expire on a specific date. Unlike an owner of the underlying security, a person cannot hold a long position in a security futures contract for an extended period of time in the hope that the

price will go up. If you do not liquidate your security futures contract, you will be required to settle the contract when it expires, either through physical delivery or cash settlement. For cash-settled contracts in particular, upon expiration, an individual will no longer have an economic interest in the securities underlying the security futures contract.

2.5. Comparison to Options

Although security futures contracts share some characteristics with options on securities (options contracts), these products are also different in a number of ways. Below are some of the important distinctions between equity options contracts and security futures contracts

If you purchase an options contract, you have the right, but not the obligation, to buy or sell a security prior to the expiration date. If you sell an options contract, you have the obligation to buy or sell a security prior to the expiration date. By contrast, if you have a position in a security futures contract (either long or short), you have both the right and the obligation to buy or sell a security at a future date. The only way that you can avoid the obligation incurred by the security futures contract is to liquidate the position with an offsetting contract.

A person purchasing an options contract runs the risk of losing the purchase price (premium) for the option contract. Because it is a wasting asset, the purchaser of an options contract who neither liquidates the options contract in the secondary market nor exercises it at or prior to expiration will necessarily lose his or her entire investment in the options contract. However, a purchaser of an options contract cannot lose more than the amount of the premium. Conversely, the seller of an options contract receives the premium and assumes the risk that he or she will be required to buy or sell the underlying security on or prior to the expiration date, in which event his or her losses may exceed the amount of the premium received. Although the seller of an options contract is required to deposit margin to reflect the risk of its obligation, he or she may lose many times his or her initial margin deposit.

By contrast, the purchaser and seller of a security futures contract each enter into an agreement to buy or sell a specific quantity of shares in the underlying security. Based upon the movement in prices of the underlying security, a person who holds a position in a security futures contract can gain or lose many times his or her initial margin deposit. In this respect, the benefits of a security futures contract are similar to the benefits of *purchasing* an option, while the risks of entering into a security futures contract are similar to the risks of *selling* an option.

Both the purchaser and the seller of a security futures contract have daily margin obligations. At least once each day, security futures contracts are marked-to-market and the increase or decrease in the value of the contract is credited or debited to the buyer and the seller. As a result, any person who has an open position in a security futures contract may be called upon to meet additional margin requirements or may receive a credit of available funds.

Example:

Assume that Customers A and B each anticipate an increase in the market price of XYZ stock, which is currently \$50 a share. Customer A purchases an XYZ 50 call (covering 100 shares of XYZ at a premium of \$5 per share). The option premium is \$500 (\$5 per share X 100 shares). Customer B purchases an XYZ security futures contract (covering 100 shares of XYZ). The total value of the contract is \$5000 (\$50 share value X 100 shares). The required margin is \$1000 (or 20% of the contract value).

Price of XYZ at Expiration	Customer A Profit/Loss	Customer B Profit/Loss
\$65	\$1000	\$1500
\$60	\$500	\$1000
\$55	\$0	\$500
\$50	- \$500	\$0
\$45	- \$500	- \$500
\$40	- \$500	- \$1000
\$35	- \$500	- \$1500

The most that Customer A can lose is \$500, the option premium. Customer A breaks even at \$55 per share, and makes money at higher prices. Customer B may lose more than his initial margin deposit. Unlike the options premium, the margin on a futures contract is not a cost but a performance bond. The losses for Customer B are not limited by this performance bond. Rather, the losses or gains are determined by the settlement price of the contract, as provided in the example above. Note that if the price of XYZ falls to \$35 per share, Customer A loses only \$500, whereas Customer B loses \$1500.

2.6. Components of a Security Futures Contract

Each regulated exchange can choose the terms of the security futures contracts it lists, and those terms may differ from exchange to exchange or contract to contract. Some of those contract terms are discussed below. However, you should ask your broker for a copy of the contract specifications before trading a particular contract.

- **2.6.1.** Each security futures contract has a set size. The size of a security futures contract is determined by the regulated exchange on which the contract trades. For example, a security futures contract for a single stock may be based on 100 shares of that stock. If prices are reported per share, the value of the contract would be the price times 100. For narrow-based security indices, the value of the contract is the price of the component securities times the multiplier set by the exchange as part of the contract terms.
- **2.6.2.** Security futures contracts expire at set times determined by the listing exchange. For example, a particular contract may expire on a particular day, e.g., the third Friday of the expiration month. Up until expiration, you may liquidate an open position by offsetting your contract with a fungible opposite contract that expires in the same month. If you do not liquidate an open position before it expires, you will be required to make or take delivery of the underlying security or to settle the contract in cash after expiration.
- **2.6.3.** Although security futures contracts on a particular security or a narrow-based security index may be listed and traded on more than one regulated exchange, the contract specifications may not be the same. Also, prices for contracts on the same security or index may vary on different regulated exchanges because of different contract specifications.
- **2.6.4.** Prices of security futures contracts are usually quoted the same way prices are quoted in the underlying instrument. For example, a contract for an individual security would be quoted in dollars and cents per share. Contracts for indices would be quoted by an index number, usually stated to two decimal places.
- **2.6.5.** Each security futures contract has a minimum price fluctuation (called a tick), which may differ from product to product or exchange to exchange. For example, if a particular security futures contract has a tick size of 1¢, you can buy the contract at \$23.21 or \$23.22 but not at \$23.215.

2.7. Trading Halts

The value of your positions in security futures contracts could be affected if trading is halted in either the security futures contract or the underlying security. In certain circumstances, regulated exchanges are required by law to halt trading in security futures contracts. For example, trading on a particular security futures contract must be halted if trading is halted on the listed market for the underlying security as a result of pending news, regulatory concerns, or market volatility. Similarly, trading of a security futures contract on a narrow-based security index must be halted under such circumstances if trading is halted on securities accounting for at least 50 percent of the market capitalization of the index. In addition, regulated exchanges are required to halt trading in all security futures contracts for a specified period of time when the Dow Jones Industrial Average ("DJIA") experiences one-day declines of 10-, 20- and 30- percent. The regulated exchanges may also have discretion under their rules to halt trading in other circumstances – such as when the exchange determines that the halt would be advisable in maintaining a fair and orderly market.

A trading halt, either by a regulated exchange that trades security futures or an exchange trading the underlying security or instrument, could prevent you from liquidating a position in security futures contracts in a timely manner, which could prevent you from liquidating a position in security futures contracts at that time.

2.8. Trading Hours

Each regulated exchange trading a security futures contract may open and close for trading at different times than other regulated exchanges trading security futures contracts or markets trading the underlying security or securities. Trading in security futures

contracts prior to the opening or after the close of the primary market for the underlying security may be less liquid than trading during regular market hours.

Section 3 - Clearing Organizations and Mark-to-Market Requirements

Every regulated U.S. exchange that trades security futures contracts is required to have a relationship with a clearing organization that serves as the guarantor of each security futures contract traded on that exchange. A clearing organization performs the following functions: matching trades; effecting settlement and payments; guaranteeing performance; and facilitating deliveries.

Throughout each trading day, the clearing organization matches trade data submitted by clearing members on behalf of their customers or for the clearing member's proprietary accounts. If an account is with a brokerage firm that is not a member of the clearing organization, then the brokerage firm will carry the security futures position with another brokerage firm that is a member of the clearing organization. Trade records that do not match, either because of a discrepancy in the details or because one side of the transaction is missing, are returned to the submitting clearing members for resolution. The members are required to resolve such "out trades" before or on the open of trading the next morning.

When the required details of a reported transaction have been verified, the clearing organization assumes the legal and financial obligations of the parties to the transaction. One way to think of the role of the clearing organization is that it is the "buyer to every seller and the seller to every buyer." The insertion or substitution of the clearing organization as the counterparty to every transaction enables a customer to liquidate a security futures position without regard to what the other party to the original security futures contract decides to do.

The clearing organization also effects the settlement of gains and losses from security futures contracts between clearing members. At least once each day, clearing member brokerage firms must either pay to, or receive from, the clearing organization the difference between the current price and the trade price earlier in the day, or for a position carried over from the previous day, the difference between the current price and the previous day's settlement price. Whether a clearing organization effects settlement of gains and losses on a daily basis or more frequently will depend on the conventions of the clearing organization and market conditions. Because the clearing organization assumes the legal and financial obligations for each security futures contract, you should expect it to ensure that payments are made promptly to protect its obligations.

Gains and losses in security futures contracts are also reflected in each customer's account on at least a daily basis. Each day's gains and losses are determined based on a daily settlement price disseminated by the regulated exchange trading the security futures contract or its clearing organization. If the daily settlement price of a particular security futures contract rises, the buyer has a gain and the seller a loss. If the daily settlement price declines, the buyer has a loss and the seller a gain. This process is known as "marking-to-market" or daily settlement. As a result, individual customers normally will be called on to settle daily.

The one-day gain or loss on a security futures contract is determined by calculating the difference between the current day's settlement price and the previous day's settlement price.

For example, assume a security futures contract is purchased at a price of \$120. If the daily settlement price is either \$125 (higher) or \$117 (lower), the effects would be as follows:

(1 contract representing 100 shares)

Daily Settlement Value	Buyer's Account	Seller's Account
\$6125	\$500 gain (credit)	\$500 loss (debit)
\$117	\$300 loss (debit)	\$300 gain (credit)

The cumulative gain or loss on a customer's open security futures positions is generally referred to as "open trade equity" and is listed as a separate component of account equity on your customer account statement.

A discussion of the role of the clearing organization in effecting delivery is discussed in Section 5.

Section 4 - Margin and Leverage

When a broker-dealer lends a customer part of the funds needed to purchase a security such as common stock, the term "margin" refers to the amount of cash, or down payment, the customer is required to deposit. By contrast, a security futures contract is an obligation and not an asset. A security futures contract has no value as collateral for a loan. Because of the potential for a loss as a result of the daily marked-to-market process, however, a margin deposit is required of each party to a security futures contract. This required margin deposit also is referred to as a "performance bond."

In the first instance, margin requirements for security futures contracts are set by the exchange on which the contract is traded, subject to certain minimums set by law. The basic margin requirement is 20% of the current value of the security futures contract, although some strategies may have lower margin requirements. Requests for additional margin are known as "margin calls." Both buyer and seller must individually deposit the required margin to their respective accounts.

It is important to understand that individual brokerage firms can, and in many cases do, require margin that is higher than the exchange requirements. Additionally, margin requirements may vary from brokerage firm to brokerage firm. Furthermore, a brokerage firm can increase its "house" margin requirements at any time without providing advance notice, and such increases could result in a margin call.

For example, some firms may require margin to be deposited the business day following the day of a deficiency, or some firms may even require deposit on the same day. Some firms may require margin to be on deposit in the account before they will accept an order for a security futures contract. Additionally, brokerage firms may have special requirements as to how margin calls are to be met, such as requiring a wire transfer from a bank, or deposit of a certified or cashier's check. You should thoroughly read and understand the customer agreement with your brokerage firm before entering into any transactions in security futures contracts.

If through the daily cash settlement process, losses in the account of a security futures contract participant reduce the funds on deposit (or equity) below the maintenance margin level (or the firm's higher "house" requirement), the brokerage firm will require that additional funds be deposited.

If additional margin is not deposited in accordance with the firm's policies, the firm can liquidate your position in security futures contracts or sell assets in any of your accounts at the firm to cover the margin deficiency. You remain responsible for any shortfall in the account after such liquidations or sales. Unless provided otherwise in your customer agreement or by applicable law, you are not entitled to choose which futures contracts, other securities or other assets are liquidated or sold to meet a margin call or to obtain an extension of time to meet a margin call.

Brokerage firms generally reserve the right to liquidate a customer's security futures contract positions or sell customer assets to meet a margin call at any time without contacting the customer. Brokerage firms may also enter into equivalent but opposite positions for your account in order to manage the risk created by a margin call. Some customers mistakenly believe that a firm is required to contact them for a margin call to be valid, and that the firm is not allowed to liquidate securities or other assets in their accounts to meet a margin call unless the firm has contacted them first. This is not the case. While most firms notify their customers of margin calls and allow some time for deposit of additional margin, they are not required to do so. Even if a firm has notified a customer of a margin call and set a specific due date for a margin deposit, the firm can still take action as necessary to protect its financial interests, including the immediate liquidation of positions without advance notification to the customer.

Here is an example of the margin requirements for a long security futures position.

A customer buys 3 July EJG security futures at 71.50. Assuming each contract represents 100 shares, the nominal value of the position is \$21,450 (71.50 x 3 contracts x 100 shares). If the initial margin rate is 20% of the nominal value, then the customer's initial margin requirement would be \$4,290. The customer deposits the initial margin, bringing the equity in the account to \$4,290.

First, assume that the next day the settlement price of EJG security futures falls to 69.25. The marked-to-market loss in the customer's equity is \$675 ($71.50 - 69.25 \times 3$ contacts $\times 100$ shares). The customer's equity decreases to \$3,615 (\$4,290 - \$675). The new nominal value of the contract is \$20,775 (69.25×3 contracts $\times 100$ shares). If the maintenance margin rate is 20% of the nominal value, then the customer's maintenance margin requirement would be \$4,155. Because the customer's equity had decreased to \$3,615 (see above), the customer would be required to have an additional \$540 in margin (\$4,155 - \$3,615).

Alternatively, assume that the next day the settlement price of EJG security futures rises to 75.00. The mark-to-market gain in the customer's equity is $$1,050 (75.00 - 71.50 \times 3 \text{ contacts} \times 100 \text{ shares})$. The customer's equity increases to \$5,340 (\$4,290 + \$1,050). The new nominal value of the contract is $$22,500 (75.00 \times 3 \text{ contracts} \times 100 \text{ shares})$. If the maintenance margin rate is 20% of the nominal value, then the customer's maintenance margin requirement would be \$4,500. Because the customer's equity had increased to \$5,340 (see above), the customer's excess equity would be \$840.

The process is exactly the same for a short position, except that margin calls are generated as the settlement price rises rather than as it falls. This is because the customer's equity decreases as the settlement price rises and increases as the settlement price falls.

Because the margin deposit required to open a security futures position is a fraction of the nominal value of the contracts being purchased or sold, security futures contracts are said to be highly leveraged. The smaller the margin requirement in relation to the underlying value of the security futures contract, the greater the leverage. Leverage allows exposure to a given quantity of an underlying asset for a fraction of the investment needed to purchase that quantity outright. In sum, buying (or selling) a security futures contract provides the same dollar and cents profit and loss outcomes as owning (or shorting) the underlying security. However, as a percentage of the margin deposit, the potential immediate exposure to profit or loss is much higher with a security futures contract than with the underlying security.

For example, if a security futures contract is established at a price of \$50, the contract has a nominal value of \$5,000 (assuming the contract is for 100 shares of stock). The margin requirement may be as low as 20%. In the example just used, assume the contract price rises from \$50 to \$52 (a \$200 increase in the nominal value). This represents a \$200 profit to the buyer of the security futures contract, and a 20% return on the \$1,000 deposited as margin. The reverse would be true if the contract price decreased from \$50 to \$48. This represents a \$200 loss to the buyer, or 20% of the \$1,000 deposited as margin. Thus, leverage can either benefit or harm an investor.

Note that a 4% decrease in the value of the contract resulted in a loss of 20% of the margin deposited. A 20% decrease would wipe out 100% of the margin deposited on the security futures contract.

<u>Section 5 – Settlement</u>

If you do not liquidate your position prior to the end of trading on the last day before the expiration of the security futures contract, you are obligated to either 1) make or accept a cash payment ("cash settlement") or 2) deliver or accept delivery of the underlying securities in exchange for final payment of the final settlement price ("physical delivery"). The terms of the contract dictate whether it is settled through cash settlement or by physical delivery.

The expiration of a security futures contract is established by the exchange on which the contract is listed. On the expiration day, security futures contracts cease to exist. Typically, the last trading day of a security futures contract will be the third Friday of the expiring contract month, and the expiration day will be the following Saturday. This follows the expiration conventions for stock options and broad-based stock indexes. Please keep in mind that the expiration day is set by the listing exchange and may deviate from these norms.

5.1. Cash settlement

In the case of cash settlement, no actual securities are delivered at the expiration of the security futures contract. Instead, you must settle any open positions in security futures by making or receiving a cash payment based on the difference between the final settlement price and the previous day's settlement price. Under normal circumstances, the final settlement price for a cash-settled contract will reflect the opening price for the underlying security. Once this payment is made, neither the buyer nor the seller of the security futures contract has any further obligations on the contract.

5.2. Settlement by physical delivery

Settlement by physical delivery is carried out by clearing brokers or their agents with National Securities Clearing Corporation ("NSCC"), an SEC-regulated securities clearing agency. Such settlements are made in much the same way as they are for purchases and sales of the underlying security. Promptly after the last day of trading, the regulated exchange's clearing organization will report a purchase and sale of the underlying stock at the previous day's settlement price (also referred to as the "invoice price") to NSCC. If NSCC does not reject the transaction by a time specified in its rules, settlement is effected pursuant to the rules of NSCC within the normal clearance and settlement cycle for securities transactions, which currently is three business days.

If you hold a short position in a physically settled security futures contract to expiration, you will be required to make delivery of the underlying securities. If you already own the securities, you may tender them to your brokerage firm. If you do not own the securities, you will be obligated to purchase them. Some brokerage firms may not be able to purchase the securities for you. If your brokerage firm cannot purchase the underlying securities on your behalf to fulfill a settlement obligation, you will have to purchase the securities through a different firm.

Section 6 - Customer Account Protections

Positions in security futures contracts may be held either in a securities account or in a futures account. Your brokerage firm may or may not permit you to choose the types of account in which your positions in security futures contracts will be held. The protections for funds deposited or earned by customers in connection with trading in security futures contracts differ depending on whether the positions are carried in a securities account or a futures account. If your positions are carried in a securities account, you will not receive the protections available for futures accounts. Similarly, if your positions are carried in a futures account, you will not receive the protections available for securities accounts. You should ask your broker which of these protections will apply to your funds.

You should be aware that the regulatory protections applicable to your account are not intended to insure you against losses you may incur as a result of a decline or increase in the price of a security futures contract. As with all financial products, you are solely responsible for any market losses in your account.

Your brokerage firm must tell you whether your security futures positions will be held in a securities account or a futures account. If your brokerage firm gives you a choice, it must tell you what you have to do to make the choice and which type of account will be used if you fail to do so. You should understand that certain regulatory protections for your account will depend on whether it is a securities account or a futures account.

6.1. Protections for Securities Accounts

If your positions in security futures contracts are carried in a securities account, they are covered by SEC rules governing the safeguarding of customer funds and securities. These rules prohibit a broker/dealer from using customer funds and securities to finance its business. As a result, the broker/dealer is required to set aside funds equal to the net of all its excess payables to customers over receivables from customers. The rules also require a broker/dealer to segregate all customer fully paid and excess margin securities carried by the broker/dealer for customers.

The Securities Investor Protection Corporation (SIPC) also covers positions held in securities accounts. SIPC was created in 1970 as a non-profit, non-government, membership corporation funded by member broker/dealers. Its primary role is to return funds and securities to customers if the broker/dealer holding these assets becomes insolvent. SIPC coverage applies to customers of current (and in some cases former) SIPC members. Most broker/dealers registered with the SEC are SIPC members; those few that are not must disclose this fact to their customers. SIPC members must display an official sign showing their membership. To check whether a firm is a SIPC member, go to www.sipc.org, call the SIPC Membership Department at (202) 371-8300, or write to SIPC Membership Department, Securities Investor Protection Corporation, 805 Fifteenth Street, NW, Suite 800, Washington, DC 20005-2215.

SIPC coverage is limited to \$500,000 per customer, including up to \$100,000 for cash. For example, if a customer has 1,000 shares of XYZ stock valued at \$200,000 and \$10,000 cash in the account, both the security and the cash balance would be protected. However, if the customer has shares of stock valued at \$500,000 and \$100,000 in cash, only a total of \$500,000 of those assets will be protected.

For purposes of SIPC coverage, customers are persons who have securities or cash on deposit with a SIPC member for the purpose of, or as a result of, securities transactions. SIPC does not protect customer funds placed with a broker/dealer just to earn interest. Insiders of the broker/dealer, such as its owners, officers, and partners, are not customers for purposes of SIPC coverage.

6.2. Protections for Futures Accounts

If your security futures positions are carried in a futures account, they must be segregated from the brokerage firm's own funds and cannot be borrowed or otherwise used for the firm's own purposes. If the funds are deposited with another entity (e.g., a bank, clearing broker, or clearing organization), that entity must acknowledge that the funds belong to customers and cannot be

used to satisfy the firm's debts. Moreover, although a brokerage firm may carry funds belonging to different customers in the same bank or clearing account, it may not use the funds of one customer to margin or guarantee the transactions of another customer. As a result, the brokerage firm must add its own funds to its customers' segregated funds to cover customer debits and deficits. Brokerage firms must calculate their segregation requirements daily.

You may not be able to recover the full amount of any funds in your account if the brokerage firm becomes insolvent and has insufficient funds to cover its obligations to all of its customers. However, customers with funds in segregation receive priority in bankruptcy proceedings. Furthermore, all customers whose funds are required to be segregated have the same priority in bankruptcy, and there is no ceiling on the amount of funds that must be segregated for or can be recovered by a particular customer.

Your brokerage firm is also required to separately maintain funds invested in security futures contracts traded on a foreign exchange. However, these funds may not receive the same protections once they are transferred to a foreign entity (e.g., a foreign broker, exchange or clearing organization) to satisfy margin requirements for those products. You should ask your broker about the bankruptcy protections available in the country where the foreign exchange (or other entity holding the funds) is located.

<u>Section 7 – Special Risks for Day Traders</u>

Certain traders who pursue a day trading strategy may seek to use security futures contracts as part of their trading activity. Whether day trading in security futures contracts or other securities, investors engaging in a day trading strategy face a number of risks.

Day trading in security futures contracts requires in-depth knowledge of the securities and futures markets and of trading techniques and strategies. In attempting to profit through day trading, you will compete with professional traders who are knowledgeable and sophisticated in these markets. You should have appropriate experience before engaging in day trading.

Day trading in security futures contracts can result in substantial commission charges, even if the per trade cost is low. The more trades you make, the higher your total commissions will be. The total commissions you pay will add to your losses and reduce your profits. For instance, assuming that a round-turn trade costs \$16 and you execute an average of 29 round-turn transactions per day each trading day, you would need to generate an annual profit of \$111,360 just to cover your commission expenses.

Day trading can be extremely risky. Day trading generally is not appropriate for someone of limited resources and limited investment or trading experience and low risk tolerance. You should be prepared to lose all of the funds that you use for day trading. In particular, you should not fund day trading activities with funds that you cannot afford to lose.

Section 8 - Other

8.1. Corporate Events

As noted in Section 2.4, an equity security represents a fractional ownership interest in the issuer of that security. By contrast, the purchaser of a security futures contract has only a contract for future delivery of the underlying security. Treatment of dividends and other corporate events affecting the underlying security may be reflected in the security futures contract depending on the applicable clearing organization rules. Consequently, individuals should consider how dividends and other developments affecting security futures in which they transact will be handled by the relevant exchange and clearing organization. The specific adjustments to the terms of a security futures contract are governed by the rules of the applicable clearing organization. Below is a discussion of some of the more common types of adjustments that you may need to consider.

Corporate issuers occasionally announce stock splits. As a result of these splits, owners of the issuer's common stock may own more shares of the stock, or fewer shares in the case of a reverse stock split. The treatment of stock splits for persons owning a security futures contract may vary according to the terms of the security futures contract and the rules of the clearing organization. For example, the terms of the contract may provide for an adjustment in the number of contracts held by each party with a long or short position in a security future, or for an adjustment in the number of shares or units of the instrument underlying each contract, or both.

Corporate issuers also occasionally issue special dividends. A special dividend is an announced cash dividend payment outside the normal and customary practice of a corporation. The terms of a security futures contract may be adjusted for special dividends.

The adjustments, if any, will be based upon the rules of the exchange and clearing organization. In general, there will be no adjustments for ordinary dividends as they are recognized as a normal and customary practice of an issuer and are already accounted for in the pricing of security futures. However, adjustments for ordinary dividends may be made for a specified class of security futures contracts based on the rules of the exchange and the clearing organization.

Corporate issuers occasionally may be involved in mergers and acquisitions. Such events may cause the underlying security of a security futures contact to change over the contract duration. The terms of security futures contracts may also be adjusted to reflect other corporate events affecting the underlying security.

8.2. Position Limits and Large Trader Reporting

All security futures contracts trading on regulated exchanges in the United States are subject to position limits or position accountability limits. Position limits restrict the number of security futures contracts that any one person or group of related persons may hold or control in a particular security futures contract. In contrast, position accountability limits permit the accumulation of positions in excess of the limit without a prior exemption. In general, position limits and position accountability limits are beyond the thresholds of most retail investors.

Whether a security futures contract is subject to position limits, and the level for such limits, depends upon the trading activity and market capitalization of the underlying security of the security futures contract.

Position limits apply are required for security futures contracts that overlie a security that has an average daily trading volume of 20 million shares or fewer. In the case of a security futures contract overlying a security index, position limits are required if any one of the securities in the index has an average daily trading volume of 20 million shares or fewer. Position limits also apply only to an expiring security futures contract during its last five trading days. A regulated exchange must establish position limits on security futures that are no greater than 13,500 (100 share) contracts, unless the underlying security meets certain volume and shares outstanding thresholds, in which case the limit may be increased to 22,500 (100 share) contracts.

For security futures contracts overlying a security or securities with an average trading volume of more than 20 million shares, regulated exchanges may adopt position accountability rules. Under position accountability rules, a trader holding a position in a security futures contract that exceeds 22,500 contracts (or such lower limit established by an exchange) must agree to provide information regarding the position and consent to halt increasing that position if requested by the exchange.

Brokerage firms must also report large open positions held by one person (or by several persons acting together) to the CFTC as well as to the exchange on which the positions are held. The CFTC's reporting requirements are 1,000 contracts for security futures positions on individual equity securities and 200 contracts for positions on a narrow-based index. However, individual exchanges may require the reporting of large open positions at levels less than the levels required by the CFTC. In addition, brokerage firms must submit identifying information on the account holding the reportable position (on a form referred to as either an "Identification of Special Accounts Form" or a "Form 102") to the CFTC and to the exchange on which the reportable position exists within three business days of when a reportable position is first established.

8.3. Transactions on Foreign Exchanges

U.S. customers may not trade security futures on foreign exchanges until authorized by U.S. regulatory authorities. U.S. regulatory authorities do not regulate the activities of foreign exchanges and may not, on their own, compel enforcement of the rules of a foreign exchange or the laws of a foreign country. While U.S. law governs transactions in security futures contracts that are effected in the U.S., regardless of the exchange on which the contracts are listed, the laws and rules governing transactions on foreign exchanges vary depending on the country in which the exchange is located.

8.4. Tax Consequences

For most taxpayers, security futures contracts are not treated like other futures contracts. Instead, the tax consequences of a security futures transaction depend on the status of the taxpayer and the type of position (e.g., long or short, covered or uncovered). Because of the importance of tax considerations to transactions in security futures, readers should consult their tax advisors as to the tax consequences of these transactions.

Section 9 - Glossary of Terms

This glossary is intended to assist customers in understanding specialized terms used in the futures and securities industries. It is not inclusive and is not intended to state or suggest the legal significance or meaning of any word or term.

Arbitrage – taking an economically opposite position in a security futures contract on another exchange, in an options contract, or in the underlying security.

Broad-based security index – a security index that does not fall within the statutory definition of a narrow-based security index (see Narrow-based security index). A future on a broad-based security index is not a security future. This risk disclosure statement applies solely to security futures and generally does not pertain to futures on a broad-based security index. Futures on a broad-based security index are under exclusive jurisdiction of the CFTC.

Cash settlement – a method of settling certain futures contracts by having the buyer (or long) pay the seller (or short) the cash value of the contract according to a procedure set by the exchange.

Clearing broker – a member of the clearing organization for the contract being traded. All trades, and the daily profits or losses from those trades, must go through a clearing broker.

Clearing organization – a regulated entity that is responsible for settling trades, collecting losses and distributing profits, and handling deliveries.

Contract – 1) the unit of trading for a particular futures contract (e.g., one contract may be 100 shares of the underlying security), 2) the type of future being traded (e.g., futures on ABC stock).

Contract month – the last month in which delivery is made against the futures contract or the contract is cash-settled. Sometimes referred to as the delivery month.

Day trading strategy – an overall trading strategy characterized by the regular transmission by a customer of intra-day orders to effect both purchase and sale transactions in the same security or securities.

EDGAR – the SEC's Electronic Data Gathering, Analysis, and Retrieval system maintains electronic copies of corporate information filed with the agency. EDGAR submissions may be accessed through the SEC's Web site, www.sec.gov.

Futures contract – a futures contract is (1) an agreement to purchase or sell a commodity for delivery in the future; (2) at a price determined at initiation of the contract; (3) that obligates each party to the contract to fulfill it at the specified price; (4) that is used to assume or shift risk;

and (5) that may be satisfied by delivery or offset.

Hedging – the purchase or sale of a security future to reduce or offset the risk of a position in the underlying security or group of securities (or a close economic equivalent).

Illiquid market – a market (or contract) with few buyers and/or sellers. Illiquid markets have little trading activity and those trades that do occur may be done at large price increments.

Liquidation – entering into an offsetting transaction. Selling a contract that was previously purchased liquidates a futures position in exactly the same way that selling 100 shares of a particular stock liquidates an earlier purchase of the same stock. Similarly, a futures contract that was initially sold can be liquidated by an offsetting purchase.

Liquid market – a market (or contract) with numerous buyers and sellers trading at small price increments.

Long – 1) the buying side of an open futures contact, 2) a person who has bought futures contracts that are still open.

Margin – the amount of money that must be deposited by both buyers and sellers to ensure performance of the person's obligations under a futures contract. Margin on security futures contracts is a performance bond rather than a down payment for the underlying securities.

Mark-to-market – to debit or credit accounts daily to reflect that day's profits and losses.

Narrow-based security index – in general, and subject to certain exclusions, an index that has any one of the following four characteristics: (1) it has nine or fewer component securities; (2) any one of its component securities comprises more than 30% of its weighting; (3) the five highest weighted component securities together comprise more than 60% of its weighting; or (4) the lowest weighted component securities comprising, in the aggregate, 25% of the index's weighting have an aggregate dollar value of average daily trading volume of less than \$50 million (or in the case of an index with 15 or more component securities, \$30 million). A security index that is not narrow-based is a "broad based security index." (See Broad-based security index).

Nominal value – the face value of the futures contract, obtained by multiplying the contract price by the number of shares or units per contract. If XYZ stock index futures are trading at \$50.25 and the contract is for 100 shares of XYZ stock, the nominal value of the futures contract would be \$5025.00.

Offsetting – liquidating open positions by either selling fungible contracts in the same contract month as an open long position or buying fungible contracts in the same contract month as an open short position.

Open interest – the total number of open long (or short) contracts in a particular contract month.

Open position – a futures contract position that has neither been offset nor closed by cash settlement or physical delivery.

Performance bond – another way to describe margin payments for futures contracts, which are good faith deposits to ensure performance of a person's obligations under a futures contract rather than down payments for the underlying securities.

Physical delivery – the tender and receipt of the actual security underlying the security futures contract in exchange for payment of the final settlement price.

Position – a person's net long or short open contracts.

Regulated exchange – a registered national securities exchange, a national securities association registered under Section 15A(a) of the Securities Exchange Act of 1934, a designated contract market, a registered derivatives transaction execution facility, or an alternative trading system registered as a broker or dealer.

Security futures contract – a legally binding agreement between two parties to purchase or sell in the future a specific quantify of shares of a security (such as common stock, an exchange-traded fund, or ADR) or a narrow-based security index, at a specified price.

Settlement price – 1) the daily price that the clearing organization uses to mark open positions to market for determining profit and loss and margin calls, 2) the price at which open cash settlement contracts are settled on the last trading day and open physical delivery contracts are invoiced for delivery.

Short – 1) the selling side of an open futures contract, 2) a person who has sold futures contracts that are still open.

Speculating – buying and selling futures contracts with the hope of profiting from anticipated price movements.

Spread – 1) holding a long position in one futures contract and a short position in a related futures contract or contract month in order to profit from an anticipated change in the price relationship between the two, 2) the price difference between two contracts or contract months.

Stop limit order – an order that becomes a limit order when the market trades at a specified price. The order can only be filled at the stop limit price or better.

Stop loss order – an order that becomes a market order when the market trades at a specified price. The order will be filled at whatever price the market is trading at. Also called a stop order.

Tick – the smallest price change allowed in a particular contract.

Trader – a professional speculator who trades for his or her own account.

Underlying security – the instrument on which the security futures contract is based. This instrument can be an individual equity security (including common stock and certain exchange traded funds and American Depositary Receipts) or a narrow-based index.

Volume – the number of contracts bought or sold during a specified period of time. This figure includes liquidating transactions.

I HEREBY ACKNOWLEDGE THAT I HAVE RECEIVED AND UNDERSTOOD THIS RISK DISCLOSURE STATEMENT.

Signature 1	Signature 2
Х	x
Print Name	Print Name
Date	Date

IRONBEAM, INC. PRIVACY POLICY

Your Privacy is Our Priority

Ironbeam, Inc. ("Ironbeam") is committed to safeguarding the personal information that you provide us. This privacy policy describes how we handle and protect personal information we collect about individuals, such as you, who apply for or receive our products and services. The provisions of this notice apply to former customers as well as our current customers. In order to preserve the integrity of the information you provide to us while opening an account with Ironbeam, one of its affiliates, or Introducing Brokers who maintain relationships with us, we want you to clearly understand how we strive to protect your privacy.

How We Protect Personal Information

Ironbeam restricts access to your personal information to firm personnel who require access to your information in order to conduct our business, service your account, and help you to accomplish your financial objectives. Individuals with access to your personal information utilize this information in order to provide you with the services you are seeking. Ironbeam's firm personnel are required to maintain and protect the confidentiality of your personal information and must follow our established procedures to ensure this. To protect your information, we maintain physical, electronic and procedural safeguards that comply with federal standards for guarding the information we collect about you. We do not rent or sell your name or personal information to anyone.

Why and How We Collect Personal Information

When you apply for or maintain an account with Ironbeam, we collect personal information about you for business purposes, such as evaluating your financial needs, processing your requests and transactions, informing you about products and services that may be of interest to you, and providing customer service. Ironbeam may collect the following types of non-public personal information from you:

- Information you provide to us on applications and other forms, such as your name, address, date of birth, social security number, occupation, financial profile, income, and information regarding your trading history;
- Information about your account balances and transactions with us and with our affiliates;
- Information we receive from consumer reporting agencies, such as your credit history and creditworthiness, and other entities not affiliated with Ironbeam; and
- Information you provide to us to verify your identity, such as a passport, or received from other entities not affiliated with Ironbeam.

Disclosure to Non-Affiliated Third Parties

Ironbeam may disclose the types of non-public information listed above to the following types of parties:

- Governmental agencies, other regulatory bodies and law enforcement officials;
- Financial service institutions (e.g. advisers, dealers, brokers, trust companies and banks) with whom we have joint marketing agreements, such as agreements to market financial services or products that we jointly offer, endorse or sponsor; and
- Companies under contract to perform services for us or on our behalf, such as vendors that prepare and mail statements and transaction confirmations or provide data processing, computer software maintenance and development, transaction processing, auditing and marketing services.

Further, Ironbeam may disclose personal information with other non-affiliated companies as permitted or required by applicable law, such as in a response to a subpoena or legal process or in order to complete a transaction which you initiated and authorized. These providers acting on our behalf are required to maintain the confidentiality of any customer information they may obtain in connection with their services. Except as described in this privacy policy, we will not use your personal information for any other purpose unless we describe how such information will be used at the time you disclose it to us or we obtain your permission to do so.

Accessing and Revisiting Your Personal Information

We endeavor to keep our customers files complete and accurate. We will give you reasonable access to the information we have about you. Most of this information is contained in account statements that you receive from us and applications that you submit to obtain our products and services. We encourage you to review this information and notify us if you believe any information should be corrected or updated. If you have a question or concern about your personal information or this privacy notice, please contact your Ironbeam representative or call 1-800-341-1941 if you would like to opt out of the disclosure of nonpublic personal information to nonaffiliated third parties.

IRONBEAM, INC. MATERIAL CONFLICTS OF INTEREST DISCLOSURE

The purpose of this document is to provide you with information about some of the material conflicts of interest that may arise between you and Ironbeam, Inc., its affiliates or its clearing firms (collectively known for purposes of this document as "Ironbeam") in connection with Ironbeam performing services for you with respect to futures, options on futures, swaps (as defined in the Commodity Exchange Act), forwards or other commodity derivatives ("Contracts"). Conflicts of interest can arise in particular when Ironbeam has an economic or other incentive to act, or persuade you to act, in a way that favors Ironbeam.

Under applicable law, including regulations of the Commodity Futures Trading Commission ("CFTC"), not all swaps are required to be executed on an exchange or swap execution facility (each, a "Trading Facility"), even if a Trading Facility lists the swap for trading. In such circumstances, it may be financially advantageous for Ironbeam to execute a swap with you bilaterally in the over-the-counter market rather than on a Trading Facility and, to the extent permitted by applicable law, we may have an incentive to persuade you to execute your swap bilaterally.

Applicable law may permit you to choose the CFTC-registered derivatives clearing organization ("Clearing House") to which you submit a swap for clearing. You should be aware that Ironbeam may not be a member of, or may not otherwise be able to submit your swap to, the Clearing House of your choice. Ironbeam consequently has an incentive to persuade you to use a Clearing House of which Ironbeam is a member.

You also should be aware that Ironbeam may own stock in, or have some other form of ownership interest in, one or more U.S. or foreign Trading Facilities or Clearing Houses where your transactions in Contracts may be executed and/or cleared. As a result, Ironbeam may receive financial or other benefits related to its ownership interest when Contracts are executed on a given Trading Facility or cleared through a given Clearing House, and Ironbeam would, in such circumstances, have an incentive to cause Contracts to be executed on that Trading Facility or cleared by that Clearing House. In addition, employees and officers of Ironbeam or its affiliate may also serve on the board of directors or on one or more committees of a Trading Facility or Clearing House. In addition, Trading Facilities and Clearing Houses may from time to time have in place other arrangements that provide their members or participants with volume, market-making or other discounts or credits, may call for members or participants to pre-pay fees based on volume thresholds, or may provide other incentive or arrangements that are intended to encourage market participants to trade on or direct trades to that Trading Facility or Clearing House. Ironbeam may participate in and obtain financial benefits from such incentive programs.

When we provide execution services to you (either in conjunction with clearing services or in an execution-only capacity), we may direct orders to affiliated or unaffiliated market-makers, other executing firms, individual brokers or brokerage groups for execution. When such affiliated or unaffiliated parties are used, they may, where permitted, agree to price concessions, volume discounts or refunds, rebates or similar payments in return for receiving such business. Likewise, where permitted by law and the rules of the applicable Trading Facility, we may solicit a counterparty to trade opposite your order or enter into transactions for its own account or the account of other counterparties that may, at times, be adverse to your interests in a Contract. In such circumstances, that counterparty may make payments and/or pay a commission to Ironbeam in connection with that transaction. The results of your transactions may differ significantly from the results achieved by us for our own account, our affiliates, or for other customers.

In addition, where permitted by applicable law (including, where applicable, the rules of the applicable Trading Facility), Ironbeam, its directors, officers, employees and affiliates may act on the other side of your order or transaction by the purchase or sale for an account, or the execution of a transaction with a counterparty, in which Ironbeam or a person affiliated with Ironbeam has a direct or indirect interest, or may affect any such order with a counterparty that provides Ironbeam with discounts related to fees for Contracts or other products. In cases where we have offered you a discounted commission or clearing fee for Contracts executed through Ironbeam as agent or with Ironbeam acting as counterparty, Ironbeam may be doing so because of the enhanced profit potential resulting from acting as executing broker or counterparty.

Ironbeam may act as, among other things, an investor, research provider, placement agent, underwriter, distributor, remarketing agent, structurer, securitizer, lender, investment manager, investment adviser, commodity trading advisor, municipal advisor, market maker, trader, prime broker or clearing broker, if properly registered to do so. In those and other capacities, Ironbeam, its directors, officers, employees and affiliates may take or hold positions in, or advise other customers and counterparties concerning, or publish research or express a view with respect to, a Contract or a related financial instrument that may be the subject of advice from us to you. Any such positions and other advice may not be consistent with, or may be contrary to, your interests or to positions which are the subject of advice previously provided by Ironbeam to you, and unless otherwise disclosed in writing, we are not necessarily acting in your best interest and are not assessing the suitability for you of any Contract or related financial instrument. Acting in one or more of the capacities noted above may give Ironbeam access to information relating to markets, investments and products. As a result, Ironbeam may be in possession of information which, if known to you, might cause you to seek to dispose of, retain or increase your position in one or more Contracts or other financial instruments. Ironbeam will be under no duty to make any such information available to you, except to the extent we have agreed in writing or as may be required under applicable law.

The Commodity Futures Trading Commission ("CFTC") requires each futures commission merchant ("FCM"), including Ironbeam, Inc. ("Ironbeam"), to provide the following information to its customers. Except as otherwise noted below, the information set out is as of July 12, 2014. Ironbeam will update this information annually and as necessary to take account of any material changes to its business operations, financial condition or other factors that Ironbeam believes may be material to a customer's decision to do business with our firm. Nonetheless, Ironbeam's business activities and financial data are not static and will change in non-material ways frequently throughout any 12-month period.

At Ironbeam we want all clients to be well-informed investors. During the account opening process and throughout your relationship with our firm, you will be provided with important disclosures and documents that will give you detailed insight into your relationship with Ironbeam and the risks involved in trading futures and options. It is important that you take the time to read and thoroughly understand this information.

Business Name and Contact Information

Ironbeam maintains it principal place of business in the Chicago Board of Trade building at 141 W. Jackson Blvd., Suite 2600, Chicago, Illinois 60604. The firm's main phone number is 1(800)-341-1941 and fax number is 1(312)-765-7201. Inquiries via email can be directed to clientservices@ironbeam.com.

Principals

Omid M. Farr

Chief Executive Officer, Founder & Principal 141 W. Jackson Blvd., Suite 2600 Chicago, IL 60604

Mr. Farr began his start in the commodity futures and options industry in 1995 and it quickly became his passion and life's work. He majored in economics, having received a Bachelor of Science degree from Santa Clara University ("SCU"), the oldest operating institution of higher learning in California. Mr. Farr graduated Summa Cum Laude and with the distinct honor of having the highest GPA of the entire graduating class.

He focused his time and research on econometric models and took advantage of SCU's prestigious agribusiness framework. This solidified the foundation of his thirst for the commodity futures and options industry and ultimately levered to the creation of an FCM in 2001. Mr. Farr created the firm as he saw an industry need for a brokerage company that focused on technology and straight through processing trade solutions, and does so with a moral conviction for high service and utmost integrity. Mr. Farr is also the sole owner of Tavage, Inc.

As the Chief Executive Officer of Ironbeam, Mr. Farr is responsible for the strategic vision of the organization and working with the firm's departmental heads on overall business development.

Robert M. Terrell

Chief Financial Officer 141 W. Jackson Blvd. Suite 2600 Chicago, IL 60604

Mr. Terrell joined Ironbeam in 2012 as its Chief Financial Officer and is responsible for all accounting, treasury and human resources activity for the firm. He has fifteen years of industry experience, which started as an auditor for the Chicago Board of Trade ("CBOT") and progressed into various financial management roles with both clearing and non-clearing FCMs throughout the years. Mr. Terrell also spent fourteen years as Chief Financial Officer at a pharmaceutical marketing firm in the suburbs of Chicago, Illinois where he successfully guided the firm through two acquisitions and increased their bottom line exponentially.

Mr. Terrell is a graduate of Illinois State University with a Bachelor of Science Degree in Accounting along with a CPA Certificate.

Significant Types of Business Activities

Ironbeam's sole business is operating as an FCM registered with the Commodity Futures Trading Commission ("CFTC") and as a member of the National Futures Association ("NFA"). Ironbeam executes trades on most major exchanges worldwide for all types of traders, including institutional, commercial and retail clients alike. We also specialize in servicing Introducing Brokers through independent and guaranteed relationships.

As a full-service FCM, our offerings are not limited to taking customer orders and executing futures and options transactions. Ironbeam provides a variety of services relating to investments in futures and options, including providing investment and market research, executing trades, providing

trading recommendations and assisting with any client service needs. All of Ironbeam's assets and capital are currently contributed to its business as an FCM and at this time, Ironbeam does not participate in any other business activities or product lines.

Ironbeam's Business on Behalf of its Customers

Ironbeam services both U.S. and foreign domiciled retail, commercial and institutional clients engaging in both speculative and bona-fide hedging transactions. From the smallest individual investors to the largest institutional clients and everything in between, we value our relationship with our customers and ensure top of the line service for all clients.

As a non-clearing FCM, Ironbeam maintains clearing firm/carrying broker relationships with ABN Amro Clearing Chicago, LLC (NFA ID#0001467) and Crossland, LLC (NFA ID#0198022). Through these relationships and our various trading platform offerings, Ironbeam provides access to approximately twenty global futures exchanges. Markets available to trade include agricultural, currencies, energies, soft commodities, metals, equity indices and fixed income contracts.

In order to ensure that Ironbeam has selected appropriate bank depositories, custodians and other counterparties for our customer segregated assets, Ironbeam follows a substantive evaluation process reviewing specific criteria to enable us to properly assess the qualifications and financial stability of these entities. For any depositories that we select to hold our customer segregated funds, Ironbeam reviews the depository's capitalization, creditworthiness, operational reliability and access to liquidity. Further, we analyze our concentration among our depositories and ensure that we have multiple relationships established to serve as a mitigating factor for this risk. We also review the availability of FDIC deposit insurance at each depository and determine the regulatory and supervisory bodies that are responsible for monitoring each entity holding customer segregated funds. Ironbeam also completes ongoing monitoring and a through due diligence review of each depository at least annually. Additionally, if Ironbeam elects to invest any customer segregated funds in permitted investments in accordance with CFTC Regulation 1.25, we consider market, credit, counterparty, operational and liquidity risks associated with such investments and assess each individual investment to ensure that it complies with the requirements of CFTC Regulation 1.25, including managing any permitted investments consistent with the objective of preserving principal and maintaining liquidity.

Material Risks

Ironbeam faces a variety of risks that may affect its operations or financial results, and many of those risks are driven by factors that Ironbeam cannot control or predict. The following discussion addresses those risks that management believes are the most significant, although there may be other risks that could arise, or may prove to be more significant than expected, that may affect Ironbeam's operations or financial results.

In order to ensure that Ironbeam is in compliance with its regulatory capital requirements and that it has sufficient liquidity to meet its ongoing business obligations, Ironbeam holds a significant portion of its assets in cash. If we elect to invest customer segregated funds, Ironbeam will typically invest in U.S. Treasury Securities, which are guaranteed as to principal and interest by the U.S. Government. Ironbeam invests its own funds in short-term, highly liquid instruments, such as high-quality equities and corporate bonds, with a minimum Moody's rating of Ba1. The average weighted maturity of all firm owned investments held is 188 months; however, all investments can be easily liquidated without material loss within one business day. Further, the average weighted coupon rate of firm owned investments is 5.46%.

Ironbeam's leverage ratio is 1.14% as of May 31, 2014. This calculation methodology is consistent with Ironbeam's CFTC/NFA regulatory filing on the 1-FR-FCM which is equal to [(Total Balance Sheet Assets less Instruments Guaranteed by the U.S. Government and Held as an Asset to Collateralize an Asset (e.g., reverse repo agreements)) less Customer Segregated Funds] divided by Total Capital, which is defined as the sum of stockholder's equity and subordinated debt. Our principal liabilities include our equity in commodity accounts for customers trading on U.S. commodity exchanges and our subordinated loan agreements as of May 31, 2014.

Ironbeam does not believe that there are any material risks posed to our customers created by any affiliate relationships and activities, nor does Ironbeam invest any customer segregated funds in an affiliated entity.

Ironbeam's business can be adversely affected by the general environment – economic, corporate, futures and options market, regulatory, and geopolitical developments all play a role in client trading activity, interest rates and overall investor engagement, and are outside of Ironbeam's control.

As a participant in the futures and options brokerage industry, Ironbeam is subject to extensive regulation under both federal and state laws by governmental agencies, supervisory authorities, and SROs. Such regulation continues to grow more extensive and complex, and regulatory proceedings continue to become more frequent and sanctions more severe. The requirements imposed by Ironbeam's regulators are designed to ensure the integrity of the financial markets, the safety and soundness of financial institutions, and the protection of clients. These regulations often may limit Ironbeam's activities by way of capital, customer protection and market conduct requirements, and restrictions on the businesses activities that Ironbeam may conduct. New legislation, rule changes, or changes in the interpretation or enforcement of existing federal, state and

SRO rules and regulations, may directly affect the operations and profitability of Ironbeam or its specific business lines. In addition, the rules and regulations could result in limitations on the lines of business Ironbeam conducts, modifications to Ironbeam's business practices, increased capital requirements, or additional costs.

While Ironbeam devotes substantial attention and resources to the reliability, capacity and scalability of its systems, trading through an electronic trading or order routing system exposes you to risks associated with system or component failure. In the event of system or component failure, it is possible that, for a certain time period, you may not be able to enter new orders, execute existing orders, or modify or cancel orders that were previously entered. System or component failure may also result in loss of orders or order priority. Some contracts offered on an electronic trading system may be traded electronically and through open outcry during the same trading hours. You should review the rules and regulations of the exchange offering the system and/or listing the contract to determine how orders that do not designate a particular process will be executed. Exchanges offering an electronic trading or order routing system and/or listing the contract may have adopted rules to limit their liability, the liability of FCMs, and software and communication system vendors and the amount of damages you may collect for system failure and delays. These limitations of liability provisions vary among the exchanges. You should consult the rules and regulations of the relevant exchange(s) in order to understand these liability limitations. Other risks of trading futures and options are disclosed in Ironbeam's account opening documents for customers that elect to move forward with trading.

Ironbeam's Designated Self-Regulatory Organization

Ironbeam's designated self-regulatory organization is the National Futures Association ("NFA"). NFA's website is www.nfa.futures.org.

Material Complaints or Actions

NFA issued a Complaint against Ironbeam on November 7, 2013 alleging Ironbeam failed to carry out AML responsibilities and failure to diligently supervise the firm's operations. Ironbeam settled this matter on the same date without admitting or denying the allegations. There have been no other material administrative, civil, enforcement or criminal complaints or actions filed or concluded within the preceding three years against Ironbeam and no such actions are currently pending or on appeal.

Customer Funds Segregation

Customer Accounts. FCMs may maintain up to three different types of accounts for customers, depending on the products a customer trades:

- (i) a Customer Segregated Account for customers that trade futures and options on futures listed on U.S. futures exchanges;
- (ii) a 30.7 Account for customers that trade futures and options on futures listed on foreign boards of trade; and
- (iii) a Cleared Swaps Customer Account for customers trading swaps that are cleared on a DCO registered with the CFTC.

The requirement to maintain these separate accounts reflects the different risks posed by the different products. Cash, securities and other collateral (collectively, **Customer Funds**) required to be held in one type of account, *e.g.*, the Customer Segregated Account, may not be commingled with funds required to be held in another type of account, *e.g.*, the 30.7 Account, except as the CFTC may permit by order. For example, the CFTC has issued orders authorizing ICE Clear Europe Limited, which is registered with the CFTC as a DCO, and its FCM clearing members: (i) to hold in Cleared Swaps Customer Accounts Customer Funds used to margin both (a) Cleared Swaps and (b) foreign futures and foreign options; raded on ICE Futures Europe, and to provide for portfolio margining of such Cleared Swaps and options on futures traded on ICE Futures U.S. and (d) foreign futures and foreign options traded on ICE Futures Europe, and to provide for portfolio margining of such transactions.

Customer Segregated Account. Funds that customers deposit with an FCM, or that are otherwise required to be held for the benefit of customers, to margin futures and options on futures contracts traded on futures exchanges located in the U.S., *i.e.*, designated contract markets, are held in a Customer Segregated Account in accordance with section 4d(a)(2) of the Commodity Exchange Act and CFTC Regulation 1.20. Customer Segregated Funds held in the Customer Segregated Account may not be used to meet the obligations of the FCM or any other person, including another customer.

All Customer Segregated Funds may be commingled in a single account, *i.e.*, a customer omnibus account, and held with: (i) a bank or trust company located in the U.S.; (ii) a bank or trust company located outside of the U.S. that has in excess of \$1 billion of regulatory capital; (iii) an FCM; or (iv) a DCO. Such commingled accounts must be properly titled to make clear that the funds belong to, and are being held for the benefit of, the FCM's customers. Unless a customer provides instructions to the contrary, an FCM may hold Customer Segregated Funds only: (i) in the

U.S.; (ii) in a money center country; ¹ or (iii) in the country of origin of the currency.

An FCM must hold sufficient U.S. dollars in the U.S. to meet all U.S. dollar obligations and sufficient funds in each other currency to meet obligations in such currency. Notwithstanding the foregoing, assets denominated in a currency may be held to meet obligations denominated in another currency (other than the U.S. dollar) as follows: (i) U.S. dollars may be held in the U.S. or in money center countries to meet obligations denominated in any other currency; and (ii) funds in money center currencies² may be held in the U.S. or in money center countries to meet obligations denominated in currencies other than the U.S. dollar.

30.7 Account. Funds that 30.7 Customers deposit with an FCM, or that are otherwise required to be held for the benefit of customers, to margin futures and options on futures contracts traded on foreign boards of trade, *i.e.*, 30.7 Customer Funds, and sometimes referred to as the foreign futures and foreign options secured amount, are held in a 30.7 Account in accordance with CFTC Regulation 30.7.

Funds required to be held in the 30.7 Account for or on behalf of 30.7 Customers may be commingled in an omnibus account and held with: (i) a bank or trust company located in the U.S.; (ii) a bank or trust company located outside the U.S. that has in excess of \$1 billion in regulatory capital; (iii) an FCM; (iv) a DCO; (v) the clearing organization of any foreign board of trade; (vi) a foreign broker; or (vii) such clearing organization's or foreign broker's designated depositories. Such commingled accounts must be properly titled to make clear that the funds belong to, and are being held for the benefit of, the FCM's 30.7 Customers. As explained below, CFTC Regulation 30.7 restricts the amount of such funds that may be held outside of the U.S.

Customers trading on foreign markets assume additional risks. Laws or regulations will vary depending on the foreign jurisdiction in which the transaction occurs, and funds held in a 30.7 Accounts outside of the U.S. may not receive the same level of protection as Customer Segregated Funds. If the foreign broker carrying 30.7 Customer positions fails, the broker will be liquidated in accordance with the laws of the jurisdiction in which it is organized, which laws may differ significantly from the U.S. Bankruptcy Code. Return of 30.7 Customer Funds to the U.S. will be delayed and likely will be subject to the costs of administration of the failed foreign broker in accordance with the law of the applicable jurisdiction, as well as possible other intervening foreign brokers, if multiple foreign brokers were used to process the U.S. customers' transactions on foreign markets.

If the foreign broker does not fail but the 30.7 Customers' U.S. FCM fails, the foreign broker may want to assure that appropriate authorization has been obtained before returning the 30.7 Customer Funds to the FCM's trustee, which may delay their return. If both the foreign broker and the U.S. FCM were to fail, potential differences between the trustee for the U.S. FCM and the administrator for the foreign broker, each with independent fiduciary obligations under applicable law, may result in significant delays and additional administrative expenses. Use of other intervening foreign brokers by the U.S. FCM to process the trades of 30.7 Customers on foreign markets may cause additional delays and administrative expenses.

To reduce the potential risk to 30.7 Customer Funds held outside of the U.S., CFTC Regulation 30.7 generally provides that an FCM may not deposit or hold 30.7 Customer Funds in permitted accounts outside of the U.S. except as necessary to meet margin requirements, including prefunding margin requirements, established by rule, regulation, or order of the relevant foreign boards of trade or foreign clearing organizations, or to meet margin calls issued by foreign brokers carrying the 30.7 Customers' positions. The rule further provides, however, that, in order to avoid the daily transfer of funds from accounts in the U.S., an FCM may maintain in accounts located outside of the U.S. an additional amount of up to 20 percent of the total amount of funds necessary to meet margin and prefunding margin requirements to avoid daily transfers of funds.

Cleared Swaps Customer Account. Funds deposited with an FCM, or otherwise required to be held for the benefit of customers, to margin swaps cleared through a registered DCO, *i.e.*, Cleared Swaps Customer Collateral, are held in a Cleared Swaps Customer Account in accordance with the provisions of section 4d(f) of the Act and Part 22 of the CFTC's Regulations. Cleared Swaps Customer Accounts are sometimes referred to as LSOC Accounts. LSOC is an acronym for "legally separated, operationally commingled." Funds required to be held in a Cleared Swaps Customer Account may be commingled in an omnibus account and held with: (i) a bank or trust company located in the U.S.; (ii) a bank or trust company located outside of the U.S. that has in excess of \$1 billion of regulatory capital; (iii) a DCO; or (iv) another FCM. Such commingled accounts must be properly titled to make clear that the funds belong to, and are being held for the benefit of, the FCM's Cleared Swaps Customers.

Investment of Customer Funds. Section 4d(a)(2) of the Act authorizes FCMs to invest Customer Segregated Funds in obligations of the United States, in general obligations of any State or of any political subdivision thereof, and in obligations fully guaranteed as to principal and interest by the United States. Section 4d(f) authorizes FCMs to invest Cleared Swaps Customer Collateral in similar instruments.

CFTC Regulation 1.25 authorizes FCMs to invest Customer Segregated Funds, Cleared Swaps Customer Collateral and 30.7 Customer Funds in instruments of a similar nature. CFTC Regulations further provide that the FCM may retain all gains earned and is responsible for investment losses incurred in connection with the investment of Customer Funds. However, the FCM and customer may agree that the FCM will pay the customer interest on the funds deposited. Please reference Ironbeam's customer agreement to determine applicability.

Money center countries means Canada, France, Italy, Germany, Japan, and the United Kingdom.

Money center currencies mean the currency of any money center country and the Euro.

Permitted investments include:

- (i) Obligations of the United States and obligations fully guaranteed as to principal and interest by the United States (U.S. government securities);
- (ii) General obligations of any State or of any political subdivision thereof (municipal securities);
- (iii) Obligations of any United States government corporation or enterprise sponsored by the United States government (U.S. agency obligations);³
- (iv) Certificates of deposit issued by a bank (certificates of deposit) as defined in section 3(a)(6) of the Securities Exchange Act of 1934, or a domestic branch of a foreign bank that carries deposits insured by the Federal Deposit Insurance Corporation;
- (v) Commercial paper fully guaranteed as to principal and interest by the United States under the Temporary Liquidity Guarantee Program as administered by the Federal Deposit Insurance Corporation (commercial paper);
- (vi) Corporate notes or bonds fully guaranteed as to principal and interest by the United States under the Temporary Liquidity Guarantee Program as administered by the Federal Deposit Insurance Corporation (corporate notes or bonds); and
- (vii) Interests in money market mutual funds.

The duration of the securities in which an FCM invests Customer Funds cannot exceed, on average, two years.

An FCM may also engage in repurchase and reverse repurchase transactions with non-affiliated registered broker-dealers, provided such transactions are made on a delivery versus payment basis and involve only permitted investments. All funds or securities received in repurchase and reverse repurchase transactions with Customer Funds must be held in the appropriate Customer Account, *i.e.*, Customer Segregated Account, 30.7 Account or Cleared Swaps Customer Account. Further, in accordance with the provisions of CFTC Regulation 1.25, all such funds or collateral must be received in the appropriate Customer Account on a delivery versus payment basis in immediately available funds.⁴

Further, CFTC Regulations require Ironbeam to hold funds deposited to margin futures and options on futures contracts traded on U.S. designated contract markets in Customer Segregated Accounts. Similarly, Ironbeam must hold funds deposited to margin cleared swaps and futures and options on futures contracts traded on foreign boards of trade in a Cleared Swaps Customer Account or a 30.7 Account, respectively. In computing its Customer Funds requirements under relevant CFTC Regulations, Ironbeam may only consider those Customer Funds actually held in the applicable Customer Accounts and may not apply free funds in an account under identical ownership but of a different classification or account type (e.g., securities, Customer Segregated, 30.7) to an account's margin deficiency. In order to be used for margin purposes, the funds must actually transfer to the identically-owned undermargined account.

For additional information on the protection of customer funds, please see the Futures Industry Association's "Protection of Customer Funds Frequently Asked Questions" located at http://www.futuresindustry.org/downloads/PCF_questions.pdf.

Filing a Complaint

At Ironbeam, it is our mission to ensure our customers' happiness and positive experience in trading futures and options. We encourage any customer to file a complaint internally with Ironbeam's Compliance Department at compliance@ironbeam.com. If at any time you have an unresolved complaint with Ironbeam, you may elect to follow the instructions below for filing a complaint with our regulatory bodies.

A customer that wishes to file a complaint about Ironbeam or one of its employees with the Commodity Futures Trading Commission ("CFTC") can contact the Division of Enforcement either electronically at https://forms.cftc.gov/fp/complaintform.aspx or by calling the Division of Enforcement toll-free at 866-FON-CFTC (866-366-2382).

Obligations issued by the Federal National Mortgage Association or the Federal Home Loan Mortgage Association are permitted only while these entities operate under the conservatorship or receivership of the Federal Housing Finance Authority with capital support from the United States.

As discussed below, NFA publishes twice-monthly a report, which shows for each FCM, *inter alia*, the percentage of Customer Funds that are held in cash and each of the permitted investments under CFTC Regulation 1.25. The report also indicates whether the FCM held any Customer Funds during that month at a depository that is an affiliate of the FCM.

A customer that may file a complaint about Ironbeam or one of its employees with the National Futures Association ("NFA"), Ironbeam's designated self-regulatory organization, electronically at http://www.nfa.futures.org/basicnet/Complaint.aspx or by calling NFA directly at 800-621-3570.

Relevant Financial Data

Ironbeam's annual audited financial statements can be viewed on our website at: www.ironbeam.com/financial-information.

As of May 31, 2014, Ironbeam's total equity and net worth was \$575,158.00. Ironbeam's regulatory capital in accordance with GAAP can be defined as its net capital, adjusted net capital, net capital required and excess net capital. As of May 31, 2014, Ironbeam's net capital was \$2,508,758.00, its adjusted net capital was \$2,348,427.00, its net capital requirement was \$1,000,000.00 and its excess net capital was \$1,348,427.00.

Ironbeam does not currently engage in any proprietary trading activities, over-the-counter transactions or illiquid financial products for which it is difficult to obtain timely and accurate pricing. Further, Ironbeam does not maintain any unsecured lines of credit or similar short-term funding obtained but not yet drawn upon. During the past 12-month period, Ironbeam has not written off any customer receivable balances as uncollectable.

As of May 31, 2014, the number of futures customers, cleared swaps customers and 30.7 customers that comprise 50% of Ironbeam's total funds held for all futures, cleared swaps and 30.7 customers is 82 accounts.

Additional financial information on all FCMs is also available on the CFTC's website at: http://www.cftc.gov/MarketReports/FinancialDataforFCMs/index.htm.

Customers should be aware that the NFA publishes on its website certain financial information with respect to each FCM. The FCM Capital Report provides each FCM's most recent month-end adjusted net capital, required net capital, and excess net capital. (Information for a twelve-month period is available.) In addition, NFA publishes twice-monthly a Customer Segregated Funds report, which shows for each FCM: (i) total funds held in Customer Segregated Accounts; (ii) total funds required to be held in Customer Segregated Accounts; and (iii) excess segregated funds, *i.e.*, the FCM's Residual Interest. This report also shows the percentage of Customer Segregated Funds that are held in cash and each of the permitted investments under CFTC Regulation 1.25. Finally, the report indicates whether the FCM held any Customer Segregated Funds during that month at a depository that is an affiliate of the FCM.

The report shows the most recent semi-monthly information, but the public will also have the ability to see information for the most recent twelve-month period. A 30.7 Customer Funds report and a Customer Cleared Swaps Collateral report provides the same information with respect to the 30.7 Account and the Cleared Swaps Customer Account.

The above financial information reports can be found by conducting a search for a specific FCM in NFA's BASIC system (http://www.nfa.futures.org/basicnet/) and then clicking on "View Financial Information" on the FCM's BASIC Details page.

Current Risk Practices, Controls and Procedures

Ironbeam has established a detailed system of risk management policies and procedures designed to monitor and manage the risks associated with the activities of our firm as an FCM. This Risk Management Program takes into account market, credit, liquidity, foreign currency, legal, operational, settlement, segregation, technological, capital and other applicable risks of Ironbeam. We have also established specific risk tolerance limits that will trigger a level of further review by senior management of the firm. Our procedures are reasonably designed to ensure that all customer segregated funds are separately accounted for at all times. Further, we have reviewed our automated financial management controls in place to prevent or mitigate the placing of erroneous orders, including those that exceed certain margin, credit or volume thresholds or limits. Ironbeam has also established written procedures to ensure that we maintain sufficient capital to be in compliance with the Commodity Exchange Act and CFTC and NFA rules and regulations, and that our firm maintains sufficient capital and liquidity to meet the reasonably foreseeable needs of Ironbeam's operations as an FCM.

Ironbeam further manages its potential risks through its policies, procedures and controls reasonably designed to achieve and/or monitor risk with applicable legal and regulatory requirements. These procedures also address issues such as business conduct and ethics, sales and trading practices, marketing and communications, books and records, anti-money laundering, client privacy, and employment policies.

IRONBEAM	
SECTION 1	
COMPLETE ALL FORMS	
	Page 34

GENERAL OR LIMITED PARTNERSHIPS, PERSONAL TRUSTS, IRA, KEOUGH PLAN, PENSION OR PROFIT SHARING TRUSTS OR PLANS APPLICATION

General Information: All field	ls must be completed. Please in	ndicate N/A if it is not applicable.	
Account Type: General Pa	rtnership	Limited Partnership	IRA or Keogh Plan
Perso	onal Trust	Personal Trust/Plan	Profit Sharing Trust
Account Designation: Speci	ulative Hedge	(If hedge, please attach Hedge Agreem	ent)
Name of General or Limited Parti Plan, Pension or Profit Sharing Tr	nerships, Personal Trusts, IRA, Keou usts or Plans	ngh Name of Contact Perso	on
Nature of Business (please descri	be)	Effective Date:	Federal Tax ID #
Registered Principal Office A	<u>ddress</u>		
City	State	Zip/Postal Code	Country
E-mail Address	Phone #	Alternate Phone	# Firm Website
Mailing Address, if different Street	from Principal Office		
City	State	Zip/Postal Code	Country
City	State	Zipyi ostai code	
-		se also submit last audited financia	
Annual Income	Net Worth \$	Risk Capital*	Amount of Initial Deposit
*Risk Capital – The amount of fu		futures and options without it material	
Trading Experience (check all			
Futures	# of Years	s Traded At Which Firm(s) and i	is the Account Currently Active?
Options			
Stocks or Stock Options			
Foreign Exchange (FOREX) or OT	C Products		

Name		Title		
. Name		Title		
- Nume		Title		
L				
. Name		Title		
Bank Information				
lame of Bank	Contact Person		Phone #	
Address		City	State	Zip/Postal Code
		·		
Account Type (Savings, Checking, MM, et	tc.) Account #		Coui	ntry
Additional Information				
Does any other person or entity have a	any financial interest in or own 10%	or more of the applicant?	Yes	No
				NO
f yes, list name(s) and ownership(s): (All owne	rs 10% or more must sign all applicable	disclosures and complete their ow	vn personal application.)	
What is the name and title of the own	laves sutherized to trade on behalvi	f of the Coneral or Limited Da	estacychia Dorronal Trust IBA	Koough Plan Poncion
 What is the name and title of the emp or Profit Sharing Trusts or Plan? 	loyee authorized to trade on behal	f of the General or Limited Pa	rtnership, Personal Trust, IRA,	Keough Plan, Pension
or Profit Sharing Trusts or Plan?	loyee authorized to trade on behal	f of the General or Limited Pa Phone #	rtnership, Personal Trust, IRA,	Keough Plan, Pension
or Profit Sharing Trusts or Plan?	loyee authorized to trade on behal		rtnership, Personal Trust, IRA,	Keough Plan, Pension
or Profit Sharing Trusts or Plan? Name	loyee authorized to trade on behal		rtnership, Personal Trust, IRA,	Keough Plan, Pension
or Profit Sharing Trusts or Plan?	loyee authorized to trade on behal		rtnership, Personal Trust, IRA,	Keough Plan, Pension
or Profit Sharing Trusts or Plan?	loyee authorized to trade on behal		rtnership, Personal Trust, IRA,	Keough Plan, Pension
or Profit Sharing Trusts or Plan? Name	loyee authorized to trade on behal		rtnership, Personal Trust, IRA,	Keough Plan, Pension
or Profit Sharing Trusts or Plan? Name Title, Occupation, Nature of Business		Phone #		
or Profit Sharing Trusts or Plan? Name		Phone #		
or Profit Sharing Trusts or Plan? Name Title, Occupation, Nature of Business		Phone #	onary Account Agreement on	Page 33)
r Profit Sharing Trusts or Plan? lame itle, Occupation, Nature of Business . Will the account be traded or managed	d by anyone else under Power of At	Phone #		
or Profit Sharing Trusts or Plan? Name Fitle, Occupation, Nature of Business	d by anyone else under Power of At	Phone #	onary Account Agreement on	Page 33)
or Profit Sharing Trusts or Plan? Name Fitle, Occupation, Nature of Business 3. Will the account be traded or managed	d by anyone else under Power of At	Phone #	onary Account Agreement on	Page 33)
or Profit Sharing Trusts or Plan? Name Fitle, Occupation, Nature of Business 3. Will the account be traded or managed	d by anyone else under Power of Ai	Phone #	onary Account Agreement on	Page 33)
r Profit Sharing Trusts or Plan? lame itle, Occupation, Nature of Business . Will the account be traded or managed yes, list Power of Attorney and complete enc	d by anyone else under Power of Ai	Phone #	onary Account Agreement on	Page 33)
r Profit Sharing Trusts or Plan? lame litle, Occupation, Nature of Business . Will the account be traded or managed yes, list Power of Attorney and complete end . Does applicant(s) control the trading in	d by anyone else under Power of Ai closed POA documents: n any other Ironbeam, Inc. account:	Phone #	onary Account Agreement on Yes	Page 33)
or Profit Sharing Trusts or Plan? Name Nature of Business	d by anyone else under Power of Ai closed POA documents: n any other Ironbeam, Inc. account:	Phone #	onary Account Agreement on Yes	Page 33)
Trusts or Plan? Islame Title, Occupation, Nature of Business To Will the account be traded or managed Tyes, list Power of Attorney and complete enc	d by anyone else under Power of Ai closed POA documents: n any other Ironbeam, Inc. account	Phone #	onary Account Agreement on Yes	Page 33) No No
or Profit Sharing Trusts or Plan? Name Title, Occupation, Nature of Business S. Will the account be traded or managed fives, list Power of Attorney and complete encodes. Does applicant(s) control the trading in fives, please list names and account numbers:	d by anyone else under Power of Ai closed POA documents: n any other Ironbeam, Inc. account	Phone #	onary Account Agreement on Yes	Page 33) No No
or Profit Sharing Trusts or Plan? Name Title, Occupation, Nature of Business S. Will the account be traded or managed fives, list Power of Attorney and complete encodes. Does applicant(s) control the trading in fives, please list names and account numbers:	d by anyone else under Power of Ai closed POA documents: n any other Ironbeam, Inc. account	Phone #	onary Account Agreement on Yes Yes	Page 33) No No an exchange member?
or Profit Sharing Trusts or Plan? Name Title, Occupation, Nature of Business B. Will the account be traded or manager f yes, list Power of Attorney and complete enc Does applicant(s) control the trading in f yes, please list names and account numbers:	d by anyone else under Power of Ai	Phone # ctorney? (if so, attach Discreti	onary Account Agreement on Yes	Page 33) No No
Trusts or Plan? Islame Title, Occupation, Nature of Business To Will the account be traded or managed Tyes, list Power of Attorney and complete enc	d by anyone else under Power of Ai	Phone # ctorney? (if so, attach Discreti	onary Account Agreement on Yes Yes	Page 33) No No an exchange member?

please provide details below. Attach additional exp	planation, if necessary, in a separate attachm	ent.	Yes	No
Presse Provide details below. Actuell additional Ex	sandasii, ii neeessai y, iii a separate attaciiii			
TE DEAD AND CION DELONA (All Account)	Haldova Barrat Ciarri			
SE READ AND SIGN BELOW (All Account I				
ndersigned applicant(s) confirms to Iron ately provided herewith is true and accu				
application form or separately provide		· · · · · · · · · · · · · · · · · · ·		
gnature 1		Signature 2		
		X		
rint Name		Print Name		
tle		Title		
ate		Date		

INDIVIDUAL, JOINT OR SOLE PROPRIETORSHIP ACCOUNT APPLICATION General Information: All fields must be completed. Please indicate N/A if it is not applicable. All 10% or greater percentage owners of a corporation or limited liability company must complete this form individually. Sole Proprietorship Name (if applicable) Individual Joint Type of Account Sole Proprietorship If Joint: Customer Name (Full Legal Name) Joint Owner (if applicable) Tenants in Right of Survivorship Common Account Designation: Speculative Hedge (If hedge, please attach Hedge Agreement) **Customer Information** Country of No. of Customer Name (Full Legal Name) Date of Birth SSN/Tax ID # Citizenship Dependents City Address Zip/Postal Code State Country Home Phone # Cell Phone # **Email Address** Fax# Single Married Divorced Separated Widowed Marital Status: Occupation Employer Nature of Business (please describe in detail) Work Address City State Zip/Postal Code Country **Individual Owner Financial Information (in USD)** Annual Income Risk Capital* Amount of Initial Deposit Net Worth *Risk Capital – The amount of funds you can afford to lose trading futures and options without it materially affecting your lifestyle. Trading Experience (check all that apply) # of Years Traded At Which Firm(s) and is the Account Currently Active? **Futures** Options Stocks or Stock Options Foreign Exchange (FOREX) or OTC Products

Bank Information				
Name of Bank	Contact Person		Phone #	
Traine or Same			1	
Address		City		Postal Code
Address		City	State Zip/i	Postal Code
Account Type (Savings, Checking, MM, etc.)		Account #		Country
Joint Owner Customer Information				
			Country of	No. of
Customer Name (Full Legal Name)	Date of Birth	SSN/Tax ID #	Citizenship	Dependents
	//			
Address	City	State	Zip/Postal Code	Country
Home Phone # Cell Phone #	Fax#	Email Address		
Marital Status: Single	Married D	vivorced Separate	ed Widowed	
July 2 mg/s		Separate	Widowed	
Occupation	Employer			
Nature of Business (please describe in detail)				
Work Address	City	State	Zip/Postal Code	Country
laint Oursey Financial Information (in USD)	<u> </u>		_	
Joint Owner Financial Information (in USD)				
Annual Income Net Wo	rth	Risk Capital*	_ Amount of	Initial Deposit
\$ \$		\$	\$	
*Risk Capital – The amount of funds you can affor	d to lose trading futures and	options without it materially at	ffecting your lifestyle.	
	•			
Joint Owner Trading Experience (check all that ap				
	# of Years Trade	d At Which Firm(s) a	nd is the Account Currently A	Active?
Futures				
Options				
_		7		
Stocks or Stock Options				
	<u> </u>	_		
Foreign Exchange (FOREX) or OTC Products				
		—		
Joint Owner Bank Information				
Name of Bank	Contact Person		Phone #	
Address		City	State	Zip/Postal Code
Account Type (Savings, Checking, MM, etc.)		Account #		Country

	more of the applicant?	Yes	No
es, list name(s) and ownership(s): (All owners 10% or more must sign all applicable disc	losures and complete their ow	n personal application.)	
Will the account be traded or managed by anyone else under Power of Attor	ney? (if so, attach Discretion	onary Account Agree	ment on Page 33)
	, , .		
es, list Power of Attorney and complete enclosed POA documents:		Yes	No
Does applicant(s) control the trading in any other Ironbeam, Inc. accounts?			
socs applicant(s) control the trading in any other nonbeam, inc. accounts:		Yes	No
es, please list names and account numbers:			
Is applicant(s) regulated by any Financial, Government or other regulators, re	egistered in any capacity w	rith the CFTC, NFA, SE	EC, or as an exchange member?
		Vee	No
es, please specify details of registration/exchange membership and include ID#, if appli	cable:	Yes	No
	nte unneid debt belences	or unrocal and matter	re with any brokers or dealers?
		or unresolved matter	rs with any brokers or dealers?
es, please provide details below. Attach additional explanation, if necessary, in a separ			
es, please provide details below. Attach additional explanation, if necessary, in a separ			
es, please provide details below. Attach additional explanation, if necessary, in a separe EASE READ AND SIGN BELOW (All Account Holders Must Sign): e undersigned applicant(s) confirm(s) to Ironbeam, Inc. that t	ate attachment. he foregoing informat	Yes	No No this application form and
EASE READ AND SIGN BELOW (All Account Holders Must Sign): e undersigned applicant(s) confirm(s) to Ironbeam, Inc. that to formation separately provided herewith is true and accurate.	ate attachment. he foregoing informat The applicant(s) agree(s	Yes	No No this application form and
EASE READ AND SIGN BELOW (All Account Holders Must Sign): e undersigned applicant(s) confirm(s) to Ironbeam, Inc. that to formation separately provided herewith is true and accurate.	ate attachment. he foregoing informat The applicant(s) agree(s	Yes	No No this application form and
EASE READ AND SIGN BELOW (All Account Holders Must Sign): e undersigned applicant(s) confirm(s) to Ironbeam, Inc. that to formation separately provided herewith is true and accurate. To formation contained in this application form or separately provided	ate attachment. he foregoing informat The applicant(s) agree(s) I herewith changes.	Yes	No No this application form and
EASE READ AND SIGN BELOW (All Account Holders Must Sign): e undersigned applicant(s) confirm(s) to Ironbeam, Inc. that to formation separately provided herewith is true and accurate. To formation contained in this application form or separately provided Signature 1	the foregoing informat the applicant(s) agree(s) therewith changes.	Yes	No No this application form and
EASE READ AND SIGN BELOW (All Account Holders Must Sign): e undersigned applicant(s) confirm(s) to Ironbeam, Inc. that to formation separately provided herewith is true and accurate. To formation contained in this application form or separately provided Signature 1 X	the foregoing informat the applicant(s) agree(s) therewith changes. Signature 2	Yes	No No this application form and
EASE READ AND SIGN BELOW (All Account Holders Must Sign): the undersigned applicant(s) confirm(s) to Ironbeam, Inc. that the formation separately provided herewith is true and accurate. It formation contained in this application form or separately provided Signature 1	the foregoing informat the applicant(s) agree(s) therewith changes. Signature 2	Yes	No No this application form and
EASE READ AND SIGN BELOW (All Account Holders Must Sign): The undersigned applicant(s) confirm(s) to Ironbeam, Inc. that the formation separately provided herewith is true and accurate. The formation contained in this application form or separately provided Signature 1 X Print Name	the foregoing informat the applicant(s) agree(s) therewith changes. Signature 2 X Print Name	Yes	No No this application form and
EASE READ AND SIGN BELOW (All Account Holders Must Sign): The undersigned applicant(s) confirm(s) to Ironbeam, Inc. that the formation separately provided herewith is true and accurate. The formation contained in this application form or separately provided Signature 1 X Print Name	the foregoing informat the applicant(s) agree(s) therewith changes. Signature 2 X Print Name	Yes	No No this application form and
Print Name Title	he foregoing informat The applicant(s) agree(s) I herewith changes. Signature 2 X Print Name Title	Yes	No No this application form and

IRONBEAM CUSTOMER AGREEMENT

In consideration of Ironbeam, Inc. ("Ironbeam") acting as broker and accepting one or more accounts for the undersigned in the purchase and sale of commodity futures contracts, commodity option contracts, cash commodities and all other transactions related thereto (hereinafter "Commodity Interests") for the undersigned ("Customer"), it is agreed with respect to all accounts, whether upon margin or otherwise, which the undersigned now has or may at any future time have with Ironbeam, including accounts from time to time closed and then reopened, as follows:

1. Authorization of Relationship.

Customer authorizes Ironbeam to purchase and sell Commodity Interests for Customer's account in accordance with Customer's oral, written, or electronic instructions as given to Ironbeam by Customer, Customer's Agent (Power of Attorney or Letter of Direction), Customer's Introducing Broker ("IB") or Associated Person ("AP"), or Floor Broker. Customer hereby waives any defense that any such instructions were not in writing as may be required by any law, rule, or regulation. Customer authorizes Ironbeam, for the accounts of Customer, to make such advances and expend such monies and, whenever possible, to borrow and deliver such monies or securities or properties as may be required with respect to such transactions. All orders to buy or sell Commodity Interests must be complete and contain the following information: (a) Whether such order is a buy or sell order; (b) Customer's Identity and account number; (c) Commodity Interest; (d) Quantity; (e) Price, if applicable; (f) Contract delivery month; (g) Any special instructions. Each Customer having an interest in a joint account shall have the authority to issue such instructions and generally to deal with Ironbeam as fully and completely as if the other person had no interest therein. Ironbeam shall be under no duty or obligation to inquire into the purpose or propriety of any instruction given by any Customer in the case of a joint account, and shall be under no obligation to see the application of any funds delivered to any Customer upon his order.

2. Risk Acknowledgment.

Customer acknowledges that an investment in Commodity Interests is speculative, involves a high degree of risk and is suitable only for persons who can assume risk of loss in excess of their margin deposits. Commodity Interests trading involves highly leveraged and rapidly fluctuating markets. Customer understands that because of the low margin normally required in Commodity Interests trading, price changes in Commodity Interests may result in significant losses, which losses may substantially exceed Customer's margin deposits. Customer represents that he or she is willing and able, financially and otherwise, to assume all risks of Commodity Interests trading, and Customer agrees not to hold Ironbeam responsible in any manner for losses incurred through following the IB's or Ironbeam's trading recommendations or suggestions of its employees, agents or representatives and expressly hereby waives any claims therefore. Customer recognizes that guarantees of profit or freedom from loss are impossible of performance in Commodity Interests trading, acknowledges that he has received no such guarantees from Ironbeam, its IBs or from any of its representatives, and has not entered into this agreement in consideration of or in reliance upon any such guarantees or similar representations. Customer agrees and understands that he or she is under an obligation to notify Ironbeam's Compliance Officer immediately in writing as to any agreement between Customer and employee or agent regarding the trading in his commodity account, including guarantees of profit or limited losses. Further, Customer understands that any representations made by anyone concerning his or her account which differ from any statements received from Ironbeam must be brought to the attention of Ironbeam's Compliance Officer immediately in writing. Customer understands that he must authorize every transaction prior to its execution unless he has delegated discretion to another party by signing Ironbeam's Discretionary Account Agreement, and any disputed transactions must be brought to the attention of Ironbeam's Compliance Officer. Customer agrees to indemnify and hold Ironbeam harmless from all damages or liability resulting from his or her failure to immediately notify Ironbeam's Compliance Officer of any of the occurrences referred to herein. All notices should be sent to Ironbeam's Chicago, Illinois location. Customer has read and understands the Risk Disclosure Statement for Futures and Options.

3. U.S./Foreign Account Designation.

There are two types of accounts on the books of Ironbeam that a Customer may maintain. One is designated as "Regulated" where all transactions designated as regulated by the Commodity Futures Trading Commission ("CFTC") will be carried and the other designated "Non-Regulated" where all other transactions will be carried. Ironbeam is hereby authorized to transfer funds as it deems necessary between these accounts depending on the Commodity Interests traded.

4. Federal, Industry and Exchange Regulations.

All transactions under this Agreement shall be subject to the applicable constitution, by-laws, rules, regulations, customs, usages, rulings and interpretations of the exchanges or markets on which such transactions are executed by Ironbeam for the Customer's account and, where applicable, to the provisions of the Commodity Exchange Act, as amended and the rules and regulations promulgated thereunder and to any other applicable government statuses, rules and regulations, and to the rules and regulations of the National Futures Association ("NFA").

5. Indemnification.

Customer agrees to indemnify Ironbeam and hold Ironbeam harmless from and against any and all deficits, liabilities, losses, damages, costs and expenses (including costs and attorneys' fees incurred in collecting such), sustained by Ironbeam resulting directly or indirectly from any action or omission by Customer with respect to the account(s), including, but not limited to any taxes that Ironbeam may be required to pay on any Commodity Interests or other property held in the accounts of the Customer, any debit

balances which may occur in the Customer's account, or any fine or penalty that Ironbeam may be required to pay because Customer caused Ironbeam to violate any statute, regulation or rule of any exchange or regulatory body. Customer also agrees to pay promptly to Ironbeam all damages, costs and expenses, including attorneys' fees, incurred by Ironbeam in the enforcement of any of the provisions of this agreement.

6. Damages for Collection.

In the instance that Customer institutes any action, proceeding, or claim of any nature against Ironbeam, and Ironbeam is successful, either totally or partially, in defending such action, proceeding or claim, Customer shall reimburse Ironbeam, upon demand, for all costs and expenses (including reasonable attorney's fees) incurred by Ironbeam in defending such action, proceeding or claim. It is further agreed that Customer shall reimburse Ironbeam on demand for any and all costs or expenses incurred in attempts to collect any amounts due from Customer to Ironbeam, including but not limited to debit/deficit balances.

7. Margins.

Customer shall provide to and maintain with Ironbeam sufficient funds to meet the applicable initial and maintenance margin requirements. Ironbeam may, from time to time, at its sole discretion, determine applicable required margin levels. Such margin requirements established by Ironbeam may exceed the margin required by any commodity exchange or other regulatory authority. Ironbeam may change margin requirements at its sole discretion at any time, effective immediately, and without notice. Customer shall, without notice or demand, maintain adequate margin at all times so as to continuously meet the margin requirements established by Ironbeam. Ironbeam may reject any order if a customer does not have sufficient margin on deposit and may delay the processing of any order while determining the correct margin status of Customer's account. If Ironbeam determines that additional margin is required, Customer agrees to immediately wire transfer funds to Ironbeam in order to adequately meet additional margin when and as required and demanded by Ironbeam. Customer will promptly meet all margin calls in such manner as Ironbeam shall designate, in its sole discretion. Choosing not to demand wire transfer of funds or the acceptance of funds by mail shall not constitute a waiver of the right of Ironbeam to demand wire transfer of funds at any time. No previous margin shall establish any precedent. Ironbeam shall not be liable to Customer for the loss of any margin deposits which is the direct or indirect result of the bankruptcy, insolvency, liquidation, receivership, custodianship, or assignment for the benefit of creditors of any bank, another clearing broker, exchange, clearing organization, or similar entity. Notwithstanding any demand for additional margin, Ironbeam at any time may proceed in accordance with liquidation procedures included below in Paragraph 8, and any failure to proceed shall not be deemed a waiver of any rights by Ironbeam. If at any time Customer's account does not contain the amount of margin required, Ironbeam may, in its sole and absolute discretion, without notice or demand to Customer, close out Customer's open position(s) in whole or in part, in any manner Ironbeam deems fit, or take any other action it deems necessary to satisfy such margin requirements. Failure of Ironbeam to close out open position(s) in whole or in part in such circumstances shall not constitute a waiver of its rights to do so at any time thereafter, nor shall Ironbeam be subject to any liability to Customer for its acts or its failure to so act.

8. Liquidation of Accounts.

In the event of (a) death or judicial declaration of incompetency of Customer, or in the case of a joint account, the death of declaration of incompetency of the last survivor thereof; (b) of a decision to dissolve and/or liquidate by a corporate Customer, which decision shall be immediately communicated to Ironbeam; (c) of the filing of a petition of Bankruptcy, or a petition for the appointment of a receiver, by or against Customer, or any one of the Customers in a joint account; (d) of the institution of any similar state, federal or other insolvency proceedings by or against the Customer; (e) an attachment is levied against the Customer's account (or any of them); (f) a notice of levy with respect to Customer's account (or any of them) is served to Ironbeam by any competent taxing authority; (g) Customer fails to timely meet any margin calls; (h) information provided by Customer on Account Application is found to be false; (i) Ironbeam's determination that any collateral deposited to protect one or more of the Customer's accounts is inadequate, regardless of current market quotations to secure the account; or (j) Ironbeam, for any reason whatsoever, deems itself insecure or if necessary for Ironbeam's protection, then Ironbeam is hereby authorized, in its sole discretion, to sell any or all of the Commodity Interests or other property of Customer which may be in Ironbeam's possession, or which Ironbeam may be carrying for Customer, or to buy in any Commodity Interests or other property of which the account or accounts of Customer may be short, or cancel any outstanding order, in order to close out the account or accounts of Customer in whole or in part or in order to close out any commitment made on behalf of Customer all without any liability on the part of Ironbeam to Customer, or any third party. Such sale, purchase or cancellation may be made according to Ironbeam's judgment and may be made at its sole discretion, on the exchange or other market where such business is usually transacted, without notice to Customer or the legal representative of Customer, and Ironbeam may purchase the whole or any part thereof free from any right of redemption. Customer shall remain liable for any deficiency, it being understood that a prior tender, demand or call of any kind from Ironbeam, or prior notice from Ironbeam, of the time or place of such sale or purchase shall not be considered a waiver of Ironbeam's rights to sell or buy any Commodity Interests or other property held by Ironbeam or owned by Customer, at any time as hereinbefore provided or to be deemed to require any such tender, demand, call or notice on any subsequent transaction.

Specifically, Ironbeam is hereby authorized, according to its judgment and in its sole discretion, to take one or more or any portion of the following actions: (1) satisfy any obligation Customer may have to Ironbeam, either directly or by way of guaranty or surety ship, out of any of Customer's funds or property in the custody or control of Ironbeam; (2) sell any or all futures contracts, commodities, or securities held or carried for Customer or purchase any or all futures contracts, commodities or securities held or carried as a short position for Customer; and (3) cancel any or all outstanding orders, contracts, or any other commitments made on behalf of Customer. Again, any of the above actions may be taken without demand for margin or additional margin, without prior notice of sale or purchase or other notice or advertisement to Customer, his personal representatives, heirs, executors, administrators, legatees, or assigns, and regardless of whether the ownership interest shall be solely Customer's or held jointly with others. In

liquidating Customer's long or short position, Ironbeam, in its sole discretion, may sell or purchase in the same contract month or initiate new long or short positions in order to establish a spread or straddle which in Ironbeam's judgment may be necessary or advisable to protect existing positions in Customer's account. Customer at all times shall be liable for the payment of any debit balance upon demand by Ironbeam, and shall be liable for any deficiency remaining in Customer's account(s) in the event of the liquidation thereof in whole or in part by Ironbeam or by Customer. In the event the proceeds realized pursuant to this authorization are insufficient for the payment of all liabilities of Customer due to Ironbeam, Customer promptly shall pay, upon demand, the deficit and all unpaid liabilities, together with interest thereon and all costs of collection including reasonable attorneys' fees. In the event Ironbeam incurs expenses, including legal fees, with respect to any account of Customer, Customer agrees to be liable therefore.

9. Security Agreement.

Customer grants Ironbeam a security interest in all monies, securities, negotiable instruments, open positions in Commodity Interests and all receipts or other documents representing underlying commodities, including without limitation warehouse receipts, and all commodities represented by such receipts or other documents or other property now or at any future time held in Customer's account or which may be in Ironbeam's possession or carried on its books for any purpose, including safekeeping, to secure the payment of all obligations of Customer to Ironbeam, irrespective of the number of accounts Customer may have with Ironbeam. Ironbeam may, at any time, in its sole discretion, liquidate any of the above-mentioned items in order to satisfy any margin or account deficiencies including but not limited to debit balances resulting from transactions executed by Ironbeam for the Customer, interest charges, services charges, expenses incurred by Ironbeam, including court costs and attorney's fees incurred in collecting debit or deficit balances of Customer in any account and may transfer said property or assets to the general ledger account of Ironbeam or pledge, transfer or lend such items, all without liability on the part of Ironbeam to Customer or any third party. These assets may be held by Ironbeam as security and are subject to a general lien and right of set-off for all liabilities of Customer to Ironbeam or any affiliate of Ironbeam. Customer agrees that all demands for debits owing Ironbeam shall be met within twenty-four (24) hours following either of (i) Customer's receipt of Ironbeam's oral request for payment or (ii) Ironbeam's delivery to Customer of Ironbeam's written request for payment (except as payment modified with respect to wire and telephone requests for margin funds as herein set forth). Further, Ironbeam is also granted a security interest on all proceeds which now or at any time may come into the Customer's account, and the Customer agrees to execute any and all documents, including Uniform Commercial Code financing statements, deemed necessary or advisable by Ironbeam to evidence or perfect such security interest.

All property carried for Customer by Ironbeam shall be segregated as required by the Commodity Exchange Act and the rules of the Commodity Futures Trading Commission ("CFTC"). Subject to such segregation requirements, Customer hereby grants to Ironbeam the right to pledge, re-pledge, hypothecate, re-hypothecate, or invest, either separately or with the property of other Customers, any securities or other property held by Ironbeam for the accounts of Customer or as collateral therefore, including without limitation to any exchange or clearing house through which trades of Customer are executed. Ironbeam shall be under no obligation to pay Customer or account for any interest, income or benefit derived from such property and funds or to deliver the same securities or other property deposited with or received by Ironbeam for the account of Customer. Ironbeam may deliver securities or other property of like or equivalent kind or amount.

10. Interest.

In accordance with CFTC Regulation 1.29, Ironbeam may receive and retain as its own any increment or interest resulting from the proper investment of funds held in the Customer's account.

11. Commissions, Fees and Other Charges.

Customer agrees to pay Ironbeam any fees and/or commission charges that may change from time to time and any other costs to Ironbeam occasioned by carrying the account of the Customer. Customer agrees that Ironbeam may debit Customer's account for customary brokerage and commission charges and for charges for any other services rendered by Ironbeam, including all payments made on behalf of the Customer, which may vary from time to time, without notice to the Customer. If a Customer's account is introduced to Ironbeam by an IB, Customer understands that the IB may charge the customer a transaction fee in addition to commissions and fees for servicing the Customer's account. Fees applied to the Customer's account may include, but are not limited to, wire transfer fees, overnight check issue fees, delivery fees, retender fees, margin call/risk liquidation fees, stop payment fees, insufficient funds fees, account transfer fees, phone order fees, inactivity or maintenance fees, market data fees and platform fees (depending on the Customer's selected platform and usage). Costs of platforms may range based on the data and features utilized. These fees may or may not be waived at Ironbeam's discretion and failure of Ironbeam to charge any particular fee does not constitute a waiver of rights to do so at any time thereafter. Customer agrees to be liable to Ironbeam for interest on amounts due from Customer to Ironbeam at the rates customarily charged by Ironbeam. Further, Customer agrees to pay any such additional fees or commissions including those charged for taking and/or making deliveries, interest, fees levied by the Regulatory authorities and commissions and fees charged for the transfer of the Customer's account to another firm.

12. Deliveries.

Liquidating instructions on open positions maturing in a current delivery month must be given to Ironbeam at least five (5) business days prior to the first notice day for all long positions, and in the case of short positions, at least five (5) business days prior to the last trading day. Customer must notify Ironbeam with instructions to liquidate or make or take delivery under such futures or forward contracts. Customer understands and acknowledges that additional risks exist when participating in the delivery process. As such, Customer agrees to deposit with Ironbeam sufficient funds to take delivery, or any additional funds as Ironbeam requires, and provide the necessary delivery documents detailing out proof of ability to make or take delivery in the same time period as described above. Ironbeam may require Customer to maintain 100% of the underlying cash value of the contract prior to its

expiration. Should such margin or documentation or instructions not be received, Ironbeam may without notice, at its sole discretion, either liquidate the Customer's position or make or receive delivery on behalf of the Customer upon such terms and by such methods which Ironbeam deems feasible. If at any time Customer fails to deliver to Ironbeam any security, commodity or other property previously sold by Ironbeam on Customer's behalf, Customer authorizes Ironbeam, in its sole discretion, to borrow or buy and deliver the same, and Customer shall immediately pay and indemnify Ironbeam for any costs, interest, losses and damages (including consequential costs, losses and damages) which Ironbeam may sustain from its inability to borrow or buy any such security, commodity or other property. In the event that Ironbeam takes delivery of any security, other property or commodity for Customer's account, Customer agrees to indemnify and hold Ironbeam harmless from and against any loss it may suffer resulting directly or indirectly from any decline in value of said security, commodity or other property.

13. Exchanges.

Unless otherwise specified, Ironbeam is authorized to execute such orders upon any exchange or other place which may be deemed by Ironbeam, in its sole discretion, to be most desirable.

14. Assignment.

This Agreement is not assignable by Customer, and may not be transferred, sold or otherwise conveyed to another party. Under certain circumstances, Ironbeam may assign the Customer's account(s) to another registered Futures Commission Merchant ("FCM") subject to National Futures Association ("NFA"), Commodity Futures Trading Commission ("CFTC"), or exchange rules. Unless the Customer objects to the assignment of its account in writing prior to the scheduled date for assignment, the assignment will be binding on the Customer.

15. Market Information/Trade Recommendations.

Customer acknowledges that (a) any market recommendations or information communicated to Customer does not necessarily constitute an offer to sell or the solicitation of an offer to buy any Commodity Interest; (b) any books, pamphlets or other information regarding market conditions or recommendations of the profitability of any particular trade or trades Customer may receive from Ironbeam are deemed by Ironbeam to have been obtained from sources believed to be reliable; and Ironbeam and the Introducing Broker ("IB") make no representation, warranty or guarantee as to, and shall not be responsible for the accuracy or completeness of any information or trading recommendations furnished to the Customer. Customer understands that Ironbeam, its affiliates or representatives and/or the IB may have a position in and may intend to buy or sell Commodity Interests which are the subject of market recommendations furnished to the Customer, and that the market position of Ironbeam or any such affiliate or representative and/or the IB may or may not be consistent with the recommendations furnished to Customer by Ironbeam and/or the IB. Ironbeam makes no representation, warranty or guarantee with respect to tax consequences of Customer's transactions.

16. Notice.

All communications, statements, reports, monies, securities, negotiable instruments, and other property may be mailed or otherwise transmitted to Customer at Customer's account mailing address as given in the Account Application, or to such address as the Customer may from time to time designate in writing. All communications sent, whether by mail, telegraph, messenger or otherwise shall be deemed received by Customer personally at the time so sent, whether actually received or not.

17. Statements and Confirmations.

Should inaccuracies or discrepancies appear on Customer's statements, margin calls, confirmations of orders, or any other notices, Customer agrees that it is Customer's duty to information Ironbeam of the problem in writing immediately upon receipt of the statement, notice, or confirmation. Such written notice must be emailed to compliance@ironbeam.com or sent registered mail, return receipt requested, to Ironbeam Compliance in Chicago, Illinois. Failure to so object shall be deemed ratification of all actions taken by Ironbeam or Ironbeam's agents prior to such reports being furnished to Customer and if written notice is not received within the time period detailed above, all transmissions will be deemed correct and shall be conclusive and binding upon Customer. Statements, equity runs or other account data sent or transmitted by anyone other than Ironbeam (i.e. IBs, CTAs, etc.) may be inaccurate. Customer agrees to hold Ironbeam harmless for any losses or damages he or she may incur as a result of requesting and/or receiving account information from anyone other than Ironbeam.

18. Events Beyond Control of Ironbeam.

Ironbeam shall not be held responsible for any loss or damage caused, directly or indirectly, by any events, action, or omissions beyond the control of Ironbeam, including without limitation, loss or damage resulting, directly or indirectly, from any delays or inaccuracies in the transmission of orders or other information due to a breakdown in or failure of any transmission or communication facilities.

19. Introducing Brokers as Third Party Beneficiary.

Customer hereby agrees that any Introducing Broker utilized by the Customer under the Agreement shall be a third-party beneficiary under the Agreement and that the obligations of Customer under the Agreement as they relate to Ironbeam or the IB shall be directly enforceable by IB as against Customer.

20. Amendments.

This Agreement may not be altered, amended or modified, unless done in writing and signed by an authorized officer of Ironbeam. No waiver or amendment shall be implied from any course of dealing between the parties or from any failure by Ironbeam or its agents to assert its rights under this agreement on any occasion or series of occasions. No oral agreements or instructions to the contrary shall be recognized or enforceable.

21. Online/Electronic Trading.

Customer acknowledges all information received and the orders placed through Ironbeam via electronic or online means (hereinafter "System") are at Customer's sole risk. Customer understands that orders which are sent directly to the exchange or floor may not stop at Customer's broker or order desk to be reviewed. As a result, errors made in the transmission of the order are the responsibility of Customer. Further, if orders are sent directly to the trading floor (or to an electronic trading system) Customer acknowledges that there may be credit limits set on the account. Ironbeam reserves the right to require a margin deposit prior to the execution of any order placed electronically or via online means. If any order which customer enters, places his or her account in an under margined condition, Ironbeam's margin policy applies. Ironbeam will not be responsible for any delay or failure to provide online or electronic services including the execution of any order, in the event that there is a restriction on your account or you delay or fail to make such a margin deposit.

Customer accepts full responsibility for monitoring its account(s) with Ironbeam. Customer shall notify Ironbeam within one (1) business day of discovering any failure to receive compilations and details of transactions or other communications from Ironbeam. Customer shall provide and confirm notice to Ironbeam by telephone, facsimile or electronically (via e-mail). Customer agrees and acknowledges that your failure to so notify Ironbeam will be deemed your affirmation that (a) the order confirmations are complete and accurate and (b) you have authorized and placed all orders listed in the account for each order confirmation. Ironbeam offers the use of various online trading platforms. You may be able to access one or more of your Ironbeam accounts and the associated trading platforms offered by Ironbeam through your own personal login information, including but not limited to account number, username, or passwords ("Access Codes"). You are solely responsible for (a) keeping your Access Codes confidential (b) all orders for, and all resulting profits and losses in, your account through the use of your Access Codes, including but not limited to orders that were not authorized by you and orders that were entered incorrectly, and (c) any changes to your account information made through the use of your Access Codes. Customer agrees to notify Ironbeam immediately of any loss, theft or unauthorized use of your Access Codes. Customer further agrees to immediately notify Ironbeam of any inaccurate account information in any report Customer receives while accessing online/electronic services.

Customer further acknowledges that Ironbeam may terminate Customer's access to the System or any portion thereof; or, place restrictions upon the Customer's trading account, without notice at any time, and for any reason. Ironbeam, in its sole discretion, may deem necessary, including but not limited to, Customer's account being under margined or in a deficit position; Ironbeam finding that the data contained in the Customer's account application is false or no longer valid; system maintenance or upgrading; Customer's breach of this Agreement; or, the unauthorized use of Customer's Access Codes. Customer understands that if there is a restriction on his or her trading account, he or she may not be able to use the System's online/electronic trading function.

Customer understands that technical problems or other conditions may delay or prevent Customer from entering or canceling an order on the System, or likewise may delay or prevent Ironbeam from executing or clearing an order on the System. Neither Ironbeam nor its affiliates shall be liable for, and Customer agrees not to hold or seek to hold Ironbeam or its affiliates liable for any technical problems, system failures and malfunctions, theft and other unauthorized access, communication line failures, equipment or software failures and malfunctions, system access issues, security breaches, system capacity issues, high Internet traffic demand or other Internet related problems, and any other similar computer problems and defects, as well as severe weather, earthquakes, floods and strikes or other labor problems in connection with the use or attempted use of the System. Ironbeam does not represent, guarantee or warrant that Customer will be able to access or use the System at times or locations of Customer's choosing, or that Ironbeam will have adequate capacity for the System as a whole or in any particular geographic location. Ironbeam does not represent, guarantee or warrant error free service.

Ironbeam does not make any guarantees or warranties, express or implied, with respect to the System or its content, including without limitation, warranties of non-infringement, title, merchantability, quiet enjoyment, or fitness for a particular purpose, and merchantability for computer problems and for informational content. Ironbeam does not guarantee that the System will be free from infection, viruses, worms, Trojan horses or other code that will manifest contaminating or destructive properties. Neither Ironbeam, nor its affiliates, shall be liable to Customer for any loss, damage, cost or other injury, whether in contract or in tort, arising out of or caused in whole or in part by Ironbeam's or Customer's use of, or reliance on, the System or its content, or in otherwise performing its obligations under or in connection with this Agreement. In no event will Ironbeam or any of its affiliates be liable to Customer or any third party for any punitive, consequential, incidental, special, indirect (including lost profits, trading losses and damages) or similar damages, even if advised of the possibility of such damage. If some jurisdictions do not allow the exclusion or limitation of liability for certain damages, in such jurisdictions the liability of Ironbeam shall be limited in accordance with this Agreement to the extent permitted by law. Ironbeam reserves the right to suspend service and deny access to the System without prior notice during scheduled or unscheduled system maintenance or upgrading. Some of the information available on the System will be provided by Ironbeam and some by third party data providers and independent sources ("Information Providers"). Customer acknowledges that the accuracy, completeness, timeliness and correct sequencing of the information concerning Customer's trading and account activity, the quotes, market and trading news, research, trading analysis, charts, strategies and other information that may be added from time to time, is not guaranteed by either Ironbeam or the Information Providers. Customer agrees that in no event shall Ironbeam, any of its affiliates, or the Information Providers have any liability for the accuracy, timeliness or correct sequencing of the information, completeness, or for any decision made or taken by users in reliance upon the information or the System, or for any interruption of any information provided by the System or for any aspect of the System. Customer further understands and agrees that neither Ironbeam nor the Information Providers have any liability for any representation, warranty or condition, express or implied with respect to any services offered to Customer, the data and information provided thereby to Customer or for any lost profits, lost revenues, loss of business or any incidental, indirect or direct, consequential, special or punitive damages relating to Customer's use of the System. In addition, some of the information may be supplied by exchanges through Information Providers, and this material is for informational purposes

only. The exchanges do not represent that the information selected for display is comprehensive, accurate, certified or complete; do not intend to, and do not, in any country, directly or indirectly, solicit business or offer any contract to any person through the medium of this information; or accept any responsibility or liability for enabling Customer to link to another site on the Internet, for the contents of any other site, or for any consequence which results from acting upon contents of another site.

22. Electronic Trading & Order Routing Systems.

Electronic trading and order routing systems differ from traditional open outcry pit trading and manual order routing methods. Transactions using an electronic system are subject to the rules and regulations of the exchange(s) offering the system and/or listing the contract. Before you engage in transactions using an electronic system, you should carefully review the rules and regulations of the exchange(s) offering the system and/or listing contracts you intend to trade. Differences among Electronic Trading Systems Trading or routing orders through electronic systems vary widely among the different electronic systems. You should consult the rules and regulations of the exchange offering the electronic system and/or listing the contract traded or order routed to understand, among other things, in the case of trading systems, the system's order matching procedure, opening and closing procedures and prices, error trade policies, and trading limitations or requirements, and in the case of all systems, qualifications for access and grounds for termination and limitations on the types of orders that may be entered into the system. Each of these matters may present different risk factors with respect to trading on or using a particular system. Each system may also present risks related to system access, varying response times, and security. In the case of Internet-based systems, there may be additional types of risks related to system access, varying response times and security, as well as risks related to service providers and the receipt and monitoring of electronic mail.

Risks Associated with System Failure: Trading through an electronic trading or order routing system exposes you to risks associated with system or component failure. In the event of system or component failure, it is possible that, for a certain time period, you may not be able to enter new orders, execute existing orders, or modify or cancel orders that were previously entered. System or component failure may also result in loss of orders or order priority. Some contracts offered on an electronic trading system may be traded electronically and through open outcry during the same trading hours. You should review the rules and regulations of the exchange offering the system and/or listing the contract to determine how orders that do not designate a particular process will be executed. Exchanges offering an electronic trading or order routing system and/or listing the contract may have adopted rules to limit their liability, the liability of FCMs, and software and communication system vendors and the amount of damages you may collect for system failure and delays. These limitations of liability provisions vary among the exchanges. You should consult the rules and regulations of the relevant exchange(s) in order to understand these liability limitations.

23. Currency Fluctuation Risk.

If Customer directs Ironbeam to enter into any Commodity Interest contract on any exchange or board of trade involving transactions effected in a foreign currency: (a) any profit or loss arising as a result of fluctuation in the exchange rate affecting such currency will be entirely for the Customer's account and risk; (b) all initial and subsequent deposits for margin purposes shall be made in U.S. Dollars in such amounts as Ironbeam in its sole discretion may require; and (c) Ironbeam has the sole discretion to convert funds in Customer's account into and from such foreign currency at a rate of exchange determined by Ironbeam as it deems necessary and proper and on the basis of then prevailing exchange rates.

24. Trading Representations.

Ironbeam, at its sole discretion, may at any time limit the number of positions which Customer may maintain or acquire through Ironbeam. Customer agrees not to exceed the position limits established by the CFTC or any contract market, whether acting alone or with others, and to promptly advise Ironbeam if Customer is required to file any reports on positions. Further, Customer understands that on certain trading days, trading in certain commodities, commodity options, leverage contracts and underlying commodities or futures contracts may cease or expire and that, with respect to commodity options and underlying commodities or futures contracts traded outside the United States, trading days and hours may not coincide with domestic trading days or hours and that these may result in financial disadvantage to Customer. Customer agrees to hold Ironbeam, Ironbeam's officers, partners, agents and IBs harmless against such loss.

25. Options Trading.

Customer understands that some exchanges and clearing houses have established cut-off times for the tender of exercise instructions and that an option will become worthless if instructions are not delivered before such expiration time. Customer also understands that certain exchanges and clearing houses automatically will exercise some "in-the-money" options unless instructed otherwise. Customer acknowledges full responsibility for taking action either to exercise or to prevent the exercise of an option contract, as the case may be; Ironbeam is not required to take any action with respect to an option contract, including without limitation any action to exercise a valuable option prior to its expiration date or to prevent the automatic exercise of an option, except upon Customer's express instructions. Customer further understands that Ironbeam has established exercise cut-off times which may be different from the times established by exchanges and clearing houses. Customer understands that (i) all short option positions are subject to assignment at any time, including positions established on the same day that exercises are assigned, and (ii) exercise assignment notices are allocated randomly from among all Ironbeam customers' short options positions which are subject to exercise.

26. Use of Trading Desk Acknowledgment.

Due to the fact that some electronic trading systems only accept orders that specify a limit price or do not accept contingent orders, the possibility of electronic system failures or unavailability, and Exchange actions beyond Ironbeam's control, all orders placed with any Ironbeam trading desk will be accepted only on a "not held basis," meaning that Ironbeam will not be responsible for failure to enter, execute, or cancel an order, absent fraud or willful misconduct. Although Ironbeam will use commercially responsible efforts to

facilitate order execution, Ironbeam cannot be held responsible, nor assume any liability, for failure to enter, execute or cancel any order. This policy will in no way preclude Ironbeam's good faith efforts to facilitate order execution.

27. Electronic Signatures.

Ironbeam may, at its sole discretion, accept electronic signatures. As such, any signatures documents signed and transmitted by facsimile or electronic mail (e-mail or other electronic means) may be accepted as original documents. The signature of any person or entity thereon, is considered an original signature and will have the same binding effect as an original signature. Customer may not raise use of an electronic signature as a defense to the enforcement of this Agreement or any other documents required by Ironbeam and electronically signed by Customer.

28. Disclosure Statement for Non-Cash Margin.

THIS STATEMENT IS FURNISHED TO YOU BECAUSE RULE 190.10 (c) OF THE COMMODITY FUTURES TRADING COMMISSION REQUIRES IT FOR REASONS OF FAIR NOTICE UNRELATED TO THIS COMPANY'S CURRENT FINANCIAL CONDITION. 1. YOU SHOULD KNOW THAT IN THE UNLIKELY EVENT OF THIS COMPANY'S BANKRUPTCY, PROPERTY, INCLUDING PROPERTY SPECIFICALLY TRACEABLE TO YOU, WILL BE RETURNED, TRANSFERRED OR DISTRIBUTED TO YOU, OR ON YOUR BEHALF, ONLY TO THE EXTENT OF YOUR PRO RATA SHARE OF ALL PROPERTY AVAILABLE FOR DISTRIBUTION TO CUSTOMERS. 2. NOTICE CONCERNING THE TERMS FOR THE RETURN OF SPECIFICALLY IDENTIFIABLE PROPERTY WILL BE BY PUBLICATION IN A NEWSPAPER OF GENERAL CIRCULATION. 3. THE COMMISSION'S REGULATIONS CONCERNING BANKRUPTCIES OF COMMODITY BROKERS CAN BE FOUND AT 17 CODE OF FEDERAL REGULATIONS PART 190.

29. Customer Representations.

Customer represents, warrants and agrees that the information contained in the Account Application is true, correct and not misleading in any respect, as of the date hereof, and agrees that Customer will promptly notify Ironbeam in writing if any of the representations contained therein materially changes or ceases to be true and correct in any material respect. Customer further represents that he or she is of legal age and sound mind and that, except as disclosed in writing to Ironbeam, no one except the Customer has any interest in the account(s) carried for Customer by Ironbeam. Further, trading in Commodity Interests is within the power of the Customer and such activity will not violate the provisions of any statutes, rules or regulations, judgments, orders, decrees or agreements to which the Customer is bound or subject.

Customer represents that he or she is not an employee of any exchange, any corporation in which any exchange owns a majority of capital stock, any member of an exchange, any firm registered on any exchange, any Futures Commission Merchant or other CFTC registrant or any bank, trust or insurance company which has not been previously disclosed to Ironbeam. In the event that Customer becomes so employed, Customer agrees that he or she will promptly notify Ironbeam in writing of such employment. Customer warrants and agrees that he or she has never been suspended or barred from trading by the CFTC or any predecessor agency or any other federal or state regulatory agency or any exchange or trade association and Customer agrees to notify Ironbeam within two (2) business days of any such change. Additionally, Customer warrants and agrees that he or she will not commence any legal, arbitration or administrative proceeding against Ironbeam or its agents until any deficit balance in Customer's account(s) is satisfied.

If Customer is a corporation, Customer represents that it is duly organized and in good standing under the laws of the state of its incorporation and every state in which it does business. Further, Customer represents that the actions of the authorized person designated in the Account Application to act for the Customer has been authorized by all necessary or appropriate corporate action, if applicable, and such person has full authority to execute this Agreement and all related documents on behalf of the Customer and to act for Customer in all matters regarding Customer's account(s). Ironbeam may, at all times, rely on the fact of such authority without any duty to investigate into either the authenticity or extent thereof. If applicable, Customer will confirm this authorization by supplying Ironbeam, within a reasonable time, prior to the commencement of trading, with an executed copy of resolutions of the Board of Directors of Customer in a form prescribed by Ironbeam. If Customer is a partnership, Customer represents that the partnership has express authority to speculate in Commodity Interests.

30. Governing Law.

This Agreement and its enforcement shall be governed by the laws of the State of Illinois. No action, regardless of form, arising out of transactions under this Agreement may be brought by Customer more than one year after the cause of action arose. Wherever possible, each provision of this Agreement shall be interpreted in such a manner as to be valid and effective under applicable law, but if any provision of this Agreement shall be prohibited by or invalid under such law, such provision shall be ineffective to the extent of such prohibition or invalidity, without invalidating the remainder of such provision or the remaining provisions of this Agreement.

31. Binding Effect.

This Agreement shall be continuous and shall cover, individually and collectively, all account(s) of Customer at any time opened or reopened with Ironbeam, irrespective of any change or changes at any time in the personnel of Ironbeam or its successors, assigns, or affiliates, for any cause whatsoever; shall inure to the benefit of Ironbeam and its successors and assigns, whether by merger, consolidation or otherwise; and shall be binding upon Customer and the estate, executors, administrators, legal representatives, successors and assigns of Customer. Customer hereby ratifies all transactions with Ironbeam effected prior to the date of this Agreement, and agrees that the rights and obligations of Customer in respect thereto shall be governed by the terms of this Agreement, which supersedes all other Customer Agreements between Ironbeam and Customer.

32. Termination.

This Agreement shall continue in effect until terminated and may be terminated by Customer at any time when Customer has no positions, no liabilities held by or owed to Ironbeam, and by providing written notification to Ironbeam's Compliance Department. This Agreement may be terminated at any time whatsoever by Ironbeam; provided, however, that any termination by either party shall not affect any transactions theretofore entered into and shall not relieve either party of any obligations in connection with any debit or credit balance or other liability or obligation incurred prior to such termination.

33. Verification.

Customer authorizes Ironbeam to contact such banks, financial institutions and credit agencies as Ironbeam shall deem appropriate from time to time to verify the information regarding Customer which may be provided by Customer from time to time. Customer understands that an investigation may be made pertaining to his personal and business credit standing.

34. Terms and Headings.

The term "Ironbeam" shall be deemed to include Ironbeam Inc., its successors and assigns; the term "Customer" shall be deemed to refer to the party or parties executing this agreement. All pronouns shall be deemed to refer to the feminine or the masculine, as the gender of Customer requires. If this is a joint account, the singular shall mean, where appropriate, all owners of an account and the statements, agreements, representations and warranties set forth herein shall be deemed to have been made by each owner of the account. The paragraph headings in this agreement are inserted for convenience of reference only and are not intended to limit the applicability or affect the meaning of any of its provisions.

35. Telephone Recording.

Customer acknowledges, authorizes and consents to the recording of Customer's telephone conversations with Ironbeam or any of its agents or associated persons by means of electronic recording devices with or without the use of an automatic tone warning device. Customer understands, authorizes and consents to the use of such recordings, and/or transcripts thereof, as evidence by either party in any action arising out of this Agreement. This paragraph authorizes Ironbeam to record, at its sole discretion and extends these rights to any Introducing Broker, Commodity Trading Advisor or account controller. Further, Ironbeam may, but shall not be required, to erase such recordings.

36. Authorization to Transfer, Liquidate and Apply Funds.

Until further notice in writing from the undersigned, Ironbeam is hereby authorized at any time and from time to time, without prior notice to the undersigned, to transfer from any account or accounts of the undersigned maintained at Ironbeam or any exchange member through which Ironbeam clears customer transactions, such excess funds, securities, commodities, commodity futures contracts, commodity options, and other property of undersigned as in Ironbeam's sole judgment may be required for margin in any other such account or accounts or to reduce or satisfy any debit balances in any other account or accounts, provided such transfer or transfers comply with relevant governmental and exchange rules and regulations applicable. Ironbeam is further authorized to liquidate any property held in any such account or accounts of the undersigned whenever in Ironbeam's sole judgment such liquidation is necessary in order to effectuate the above authorized transfer and application of property. Within a reasonable time after making any such transfer or application, Ironbeam will confirm the transfer in writing.

37. Introducing Brokers and Commodity Trading Advisors.

If Customer account is introduced by an IB or CTA to Ironbeam, it is being carried on Ironbeam's books on a "fully-disclosed basis". Customer understands that Ironbeam is employed to perform certain bookkeeping and operational functions with regard to Customer's account. Customer understands that Ironbeam is responsible for executing and confirming transactions effected for Customer's account, segregating funds in accordance with the rules and regulations promulgated by the CFTC and margining Customer's account. Further, Ironbeam is responsible for providing Customer statements and reports of all transactions. IB or CTA is responsible for entering orders for Customer's account, risk, supervising sales practices and collecting funds on behalf of Customer's behalf by means of checks payable to Ironbeam only. Customer acknowledges that Ironbeam is not responsible for the conduct, representations, and statements of the IB, CTA or its associated persons in the handling of Customer's account. Customer agrees to waive any claims against Ironbeam, and to indemnify and hold Ironbeam harmless, for any actions or omissions of the IB, CTA or its associated persons. Customer hereby agrees that any IB or CTA utilized by the Customer shall be a third-party beneficiary to this contract and that the obligations of the Customer under this agreement as they relate to Ironbeam or the IB or CTA shall be directly enforceable by the IB or CTA as against Customer.

38. Joint Account Provision.

If this account is a joint account, the Customers agree, jointly and severally, that the foregoing Agreement and all matters contained herein are the joint and several rights and obligations of the Customer. Each of the Customers has the authority to act on behalf of the joint account as if he or she alone were interested therein all without notice to the others interested in said account, including but not limited to conferral or revocation of authority hereunder. All property of any one or more of the Customers held or carried by Ironbeam shall be as collateral security and with general lien thereon for the payment of debits, losses or expenses incurred in the joint account and vice versa, however arising. In the event of the death, or legal incapacity, of any of the Customers, the survivors shall immediately give Ironbeam written notice thereof, and Ironbeam, before or after receiving such notice, may take such action, institute such proceeding, require such papers, retain such portion of the account, and restrict transactions in the account as Ironbeam may deem advisable to protect Ironbeam against any tax, liability, penalty, or loss under any present or future laws or otherwise. The estate(s) of any of the Customers who shall have died shall be liable, and the survivors shall continue to be liable, to Ironbeam for any debit balance or loss in the account in any way resulting from the

		the	·	interests of t	of the written notice of the death of the decedent, or incurred in he respective parties. If Customer fails to select the joint account y with Right of Survivorship.	
		IF T	HIS IS A JOINT ACCOUNT, CHOOSE ONE OF THE FOL	LOWING:		
		(a)	in-common in the account(s) hereunder. In the	event of the the the ter	unt as joint tenants with rights of survivorship and not as tenants- death of any of the undersigned, the entire interest in the joint ms and conditions as theretofore held, without in any manner erein.	
		(b)	undersigned, the interest in the account shall vest	in the unders	as tenants-in-common. In the event of the death of any of the signed in accordance with the instrument creating the co-tenancy the undersigned, without in any manner releasing the decedent's	
	39.	lror sale affii here hav rem You	e statements (collectively "Customer Statements") rmative steps to access documents on Ironbeam's eby requests and consents that all Customer stateming account statements delivered to Customer in halain in effect until Customer delivers written notice to	rmations of t by e-mail, or website for v nents be deliv ard copy form o Ironbeam to	crade, purchase and sale statements, and monthly purchase and other electronic delivery, whereby Customer may need to take iewing or downloading (herein "Electronic Delivery"). Customer ered to Customer by e-mail or other Electronic Delivery in lieu of by mail. This consent to Electronic Delivery is revocable but will be revoke such consent and requests hard copy mailed statements. at any time. Ironbeam reserves the right to apply a processing	
		<u>Sen</u>	d Duplicate Statements to:			
			Name:			
			Relationship to Applicant:			
			E-Mail Address:			
	40.	Cus brin this in the con othe Cus othe	ags against Ironbeam or; (b) to collect any debit bath Agreement is made in the State of Illinois (upon act the account established hereby, Customer is transact sents to jurisdiction of this person in the Courts of the Illinois (upon act the account established hereby, Customer is transact sents to jurisdiction of this person in the Courts of the Illinois Illinois (upon account to jurisdiction) and the Illinois (upon account to jurisdiction) and in the Illinois (upon account to jurisdiction) and interest (upon account to jurisdiction) and intere	lances in Custoceptance by ting business of the State te of Illinois. The manner of	rred by Ironbeam: (a) to defend any unsuccessful claim Customer tomer account(s). Customer hereby expressly acknowledges that Ironbeam), and further, that by virtue of trading futures contracts in the State of Illinois; accordingly, Customer hereby submits and of Illinois and, shall be amendable to service and summons and Customer agrees that any controversy between Ironbeam and resolution, shall be arbitrated, litigated (tried in a court of law), or lition, Customer hereby waives trial by jury in any such action or	; ;
appr agree limit	oved es to ed pa	by Ir all of irtne	onbeam's New Accounts Department. The undersign the terms and conditions of the agreement set fort	gned Customo h above and I	me a binding contract between Customer and Ironbeam untiler hereby understands the Customer Agreement and consents and has not modified same, unless agreed to in writing by Ironbeam. If LLC, all owners with ownership greater than 10% must sign. All	
	Signa	ature	<u>:1</u>		Signature 2	
	Х				х	
Γ	Print	Nan	ne		Print Name	
L	Date				Date	

ELECTRONIC TRADING AND ORDER ROUTING SYSTEM DISCLOSURE

Electronic trading and order routing systems differ from traditional open out-cry pit trading and manual order routing methods. Transactions using an electronic system are subject to the rules and regulations of the exchange(s) offering the system and/or listing the contract. Before you engage in such transactions using an electronic system, you should carefully review the rules and regulations of the exchange(s) offering the system and or/listing contracts you intend to trade.

System Failure Risks

Trading through an electronic trading or order routing system exposes you to risks associate with system or component failure. In the event of system or component failure, it is possible that, for a certain time period, you may not be able to enter new orders, execute existing orders or modify or cancel orders that were previously entered. System or component failure may also result in loss of orders of order priority.

Simultaneous Open Outcry Pit And Electronic Trading Systems

Some contracts offered on an electronic trading system may be traded electronically and through open outcry during the same trading hours. You should review the rules and regulations of the exchange offering this system and/or listing the contract to determine how orders that do not designate a particular process will be executed.

Differences Between Electronic Trading Systems

Trading or routing orders through electronic systems varies widely among the different electronic systems. You should consult the rules and regulations of the exchange offering this system and/or listing the contract traded or order routed to understand that in the case of trading systems, the system's matching procedure, opening and closing procedures and prices, error trade policies and trading limitations or requirements and, in the case of all systems, qualifications for access and grounds for termination and limitations on the types of orders that may be entered into the system. Each of these matters may present different risk factors with respect to trading on or using a particular system. Each system may also present risks related to system access, varying response times and security. In the case of internet-based systems, there may be additional risks related to service providers and the receipt and monitoring of electronic mail.

Limitation of Liability

Exchanges offering an electronic trading or order routing system and/or listing the contract may have adopted rules to limit their liability, the liability of the FCMs, and software and communication system vendors and the amount of damages you may collect for system failure and delays. These limitations of liability provisions vary among the exchanges. You should consult the rules and regulations of the relevant exchange(s) in order to understand these liability decisions.

I HEREBY ACKNOWLEDGE THAT I HAVE RECEIVED AND UNDERSTOOD THIS RISK DISCLOSURE STATEMENT.

All account holders must sign.

Signature 1	Signature 2	
х	Х	
Print Name	Print Name	
Date	Date	

INTRODUCING BROKER AUTHORIZATION

Note: Customer's account may have been introduced to Ironbeam, Inc. ("Ironbeam") by an Introducing Broker ("IB") that is an independent IB ("Independent Firm") or by an IB guaranteed by Ironbeam that subsequently becomes an Independent Firm. In such cases, this agreement applies.

Ironbeam's role is limited to matters relating to the execution and record keeping of transactions for the Customer's account, and Ironbeam shall only be liable for direct damages caused by its gross negligence or willful misconduct in its performance of these activities. Ironbeam shall have no liability for following instructions received from Customer or Customer's Independent Firm. While the law requires Customer to send all funds and other property to Ironbeam, and for Ironbeam to provide account statements to the Customer, Customer's primary relationship is with the Independent Firm on whose representations Customer relies to service its account.

Customer understands and agrees that its Account(s) will be carried with Ironbeam on a disclosed basis. All documents must be appropriately completed and returned to Ironbeam (along with margin funds) before an account can be opened. Some of these forms or other information requested is required by Ironbeam, by Federal laws and industry or exchange rules and regulations.

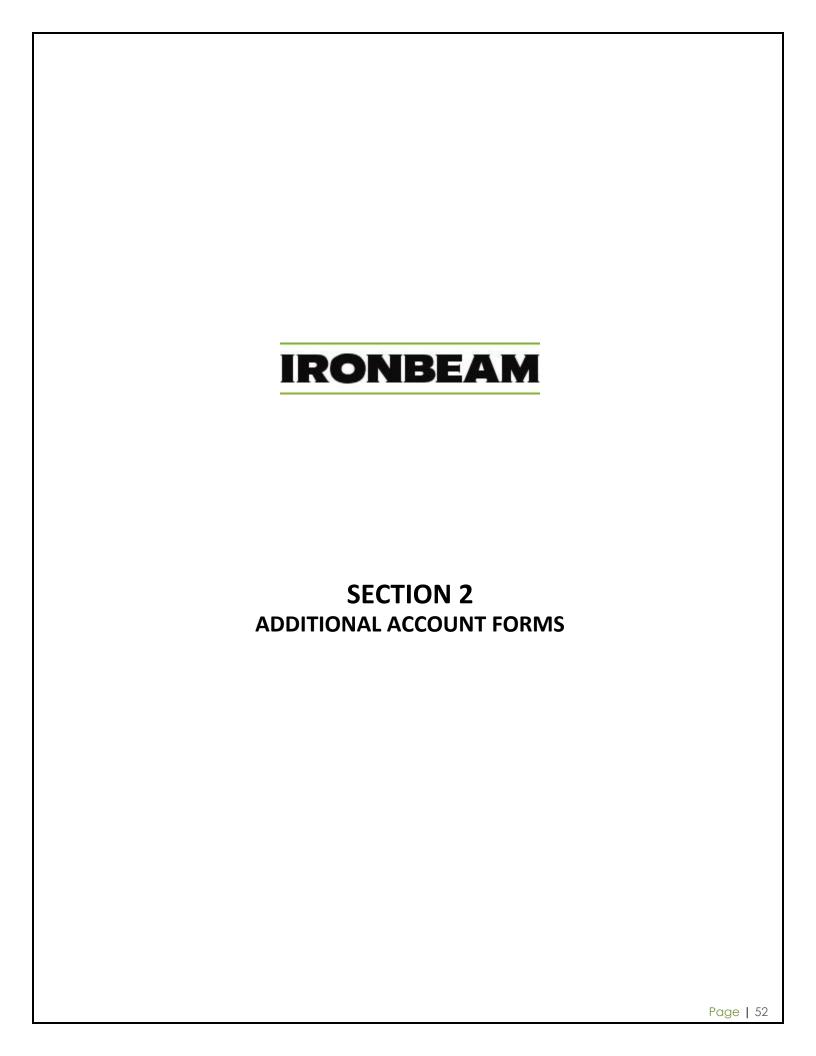
Ironbeam is separate and independent from the Independent Firm from which Customer was introduced to Ironbeam. The Independent Firm is free, under the terms of its agreement with Ironbeam, to introduce Customer accounts for execution and record keeping services to a futures commission merchant, or clearing firm other than Ironbeam. The Independent Firm is also able to terminate their agreement with Ironbeam at any time. Ironbeam does not set the rate of commission or fees that the Customer is charged. All fees are negotiated between the Customer and the Independent Firm. Ironbeam charges Independent Firm a clearing fee that is reasonably related to Ironbeam's costs of trade execution and recordkeeping. ACCORDINGLY, CUSTOMER HEREBY WAIVES ALL CLAIMS UNDER COMMON LAW, FEDERAL OR STATE STATUTES, RULES OR REGULATIONS, INCLUDING WITHOUT LIMITATION, SECTION 2(a)(I)(B) OF THE COMMODITY EXCHANGE ACT, THAT IRONBEAM IS VICARIOUSLY LIABLE FOR ANY ACT OR OMISSION OF THE INDEPENDENT FIRM OR ITS BROKERS.

The Independent Firm is a registered entity examined and regulated by the National Futures Association or other self-regulatory organization. Ironbeam is not responsible for ensuring or monitoring the Independent Firm's compliance with government rules or regulations. The Independent Firm has complete discretion over whom it employs as its brokers and is responsible for its own compliance and procedures governing the solicitation of customer accounts. Ironbeam is not responsible for the conduct, representations, or statements of anyone working for the Independent Firm, as employee or independent contractor. Ironbeam has no duty to monitor the trading in Customer's account or to determine whether such trading is consistent with the Customer's objectives or recommendations of the Independent Firm. ACCORDINGLY, CUSTOMER HEREBY WAIVES ALL CLAIMS UNDER COMMON LAW, FEDERAL OR STATE STATUTES, RULES AND REGULATIONS, INCLUDING WITHOUT LIMITATION, CLAIMS UNDER SECTION 13 OF THE COMMODITY EXCHANGE ACT, THAT IRONBEM AIDED AND ABETTED ANY ACT OF THE INDEPENDENT FIRM OR ITS BROKERS.

Customer further agrees that Ironbeam is not responsible or liable whatsoever for any matter relating to sales practices, trading practices, errors in order entry or any similar or other matter, it being expressly understood, agreed and acknowledged by Customer that Ironbeam's sole responsibilities hereunder relate to the execution, clearing, accounting and confirmation of transactions for my account on various exchanges in accordance with the instructions received by Ironbeam from IB for and on behalf of Customer in accordance with usual and customary practices. Customer agrees to refrain from bringing any action or counterclaim against Ironbeam and will assert any such claim against only the IB (or, when applicable, the commodity pool operator or commodity trading advisor) for any redress with respect to any matter other than Ironbeam's gross negligence or willful misconduct in executing, facilitating clearing and/or accounting of transactions.

All account holders must sign. This form is a contractual agreement. Do not sign below until you have read this agreement carefully.

Signature 1	Signature 2
Χ	Х
Print Name	Print Name
Title	Title
Date	Date



			PARTNERSHIP AUTHO	RIZATION	
, the nized emer		lersigned, being General Partner(s) of existing under the laws of the State of _	, the	("Partnership") DC	, a General Partnership/Limited Partnersh HEREBY CERTIFY in accordance with its Partnersh
(1)	com				for the purpose of trading and otherwise dealing if for Risk ("EFR") transactions and related investment
(2)	That	each of the following General Partners of the	ne Partnership whose signatures	s we certify are true	and genuine:
		<u>Name</u>	<u>Title</u>		<u>Signature</u>
reby	autho	rized and empowered:			
	(a)	To execute documents binding the Partne documents, instruments or notices necessary			; and to execute and deliver any and all agreemen such account(s);
	(b)	To buy, sell and agree to buy and sell Compower to sell "short";	nmodity Contracts for present of	or future delivery, o	n margin or otherwise, the power to sell including t
	(c)	· · · · · · · · · · · · · · · · · · ·	·	•	I all other activities in connection with options;
	(d)	options on futures contracts;	firm money, securities and otr	ner property for the	e purchase or sale of Commodity Contracts, includi
	(e)	To receive and promptly comply with req demands of whatsoever character, including		• .	of intention to sell or purchase and other notices a
	(f)	To receive and acquiesce in or provide no	•	•	notices statements of account and other records a
	(g)	documents; To enter into and execute on behalf of the Partnership's account(s); and,	he Partnership a Discretionary	Account Agreemer	nt and other necessary agreements for trading of t
	(h)	To take such other actions as may be necessof the Partnership in connection with the a	· ·		egoing and the satisfaction of each and every obligation of each and every obligations.
(3)		: Ironbeam is authorized to act upon the nership Agreement is provided to Ironbeam;		ntil a modification	or amendment to the Partnership Authorization o
(4)	Iron beca	beam be and hereby are ratified; and, the	Partnership will indemnify Iron	nbeam and hold Iro	e made on behalf of this Partnership through or wit onbeam harmless from and against any loss incurre ct or the above Agreements shall not have been full
ITNE	SS WI	HEREOF, we have subscribed our names to th	nis Certificate on	, 2	0
Sig	gnature	e 1		Signature 2	
Pri	int Nar	ne/Title		Print Name/Title	

PERSONAL GUARANTEE AGREEMENT

which this Guarantee is attached, with	referred to therein as Customer, and for other good nereby acknowledged, the undersigned hereby, jointly and severally, and in the full and complete performance of any and all of the duties and obligations of expenses which may become recoverable by Ironbeam from Customer. This on of the Customer Agreement; provided, however, that the undersigned shall any claim of Ironbeam against Customer which claim arises out of or relates to, discharged in full. All monies, securities, negotiable instruments, open positions property now or at any future time that are on deposit with Ironbeam in ronbeam and shall be subject to a security interest in Ironbeam's favor for the also grants Ironbeam the right to use the above-described properties to offset debit accounts not promptly paid.
unconditionally guarantees immediate payment, upon demand, to act against any other collateral before proceeding on this Guarathat Ironbeam is allowing the Customer to open an account or acceptressly waives notice of acceptance hereof, and of non-performance of the contract of the cont	In digital performance and not of collection only. Accordingly, each of the undersigned to Ironbeam of all amounts guaranteed hereunder. Ironbeam has no obligation antee. Each of the undersigned acknowledges the undersigned's understanding counts with Ironbeam in reliance upon this Guarantee. The undersigned hereby formance, in any respect, by Customer of any of its duties or obligations, as an, it successors and assigns and shall be binding on the undersigned, his/their
transactions under this Agreement may be brought by Customer provision of this Agreement shall be interpreted in such a manner	e laws of the State of Illinois. No action, regardless of form, arising out or more than one year after the cause of action arose. Wherever possible, each er as to be valid and effective under applicable law, but if any provision of this ch provision shall be ineffective to the extent of such prohibition or invalidity ming provisions of this Agreement.
All Guarantors must sign.	S DEAD AND UNDERSTOOD THIS GUADANTES AGDESMENT AND WANTES AND
DEFENSE THERETO.	IS READ AND UNDERSTOOD THIS GUARANTEE AGREEMENT AND WAIVES ANY
Signature 1	Signature 2
X	X
Print Name	Print Name
Date	Date
Address	Address
City, State, Zip	City, State, Zip
Social Security or Tax ID Number	Social Security or Tax ID Number
Relationship to Account Holder	Relationship to Account Holder

ACCOUNT TRANSFER AUTHORIZATION FORM Date: _ To: (FIRM YOU ARE TRANSFERRING YOUR ACCOUNT FROM) **FROM RECEIVING FIRM:** Telephone #: Ironbeam. Inc. 141 W. Jackson Blvd., Suite #2600 Chicago, IL 60604 **Account Name: Attention: New Accounts** Toll Free: 1.800.341.1941 Phone: 1.312.765.7250 Account Number(s): Fax: 1.312.765.7201 Dear Sir/Madam: Please be advised that the customer named above desires to transfer its account balance, margin, open futures and options positions and treasury bills from your firm to Ironbeam, Inc., 141 W. Jackson Blvd., Suite #2600, Chicago, Illinois 60604, effective ______, 20_ ("Effective Date"). Accordingly, this letter will serve as authorization and direction to you to close such customer's account(s) with your firm and send a wire transfer representing the net available cash balance in each of such customer's account (regulated and non-regulated) as of the market close of the Effective Date in accordance with the wire transfer instructions set forth below. If you are unable to send the funds by wire transfer, you are directed to issue a check and make such a check payable and send it as instructed below. WIRE: **CHECK:** BMO Harris Bank, N.A. Ironbeam, Inc. Chicago, Illinois 141 W. Jackson Blvd., Suite #2600 ABA#: 071-000-288 Chicago, Illinois 60604 Credit to: Ironbeam, Inc. **Attn: New Accounts Customer Segregated Funds** Further Benefit of: (Account Name) Account Number: 3031226 For further credit to: (Your name & Ironbeam acct. #) In addition, the undersigned directs you to cancel any pending open orders and transfer all open futures and options positions to Ironbeam, Inc., including the margin held to secure the customer's open positions with your firm as of the market close of the Effective Date. Please include a copy of the Customer's last account statement. Signature 2 Signature 1 Х Χ Print Name and Title (If applicable) Print Name and Title (If applicable) Date Date

ADDITIONAL ACCOUNT AUTHORIZATION

The undersigned (Customer) wishes to establish an additional trading account with Ironbeam, Inc. ("Ironbeam"), for the purposes stated below. As such, Customer hereby authorizes and directs Ironbeam to open a new account using all existing account documentation, including but not limited to agreements and risk disclosure acknowledgments, maintained and existing on file with Ironbeam. Customer hereby acknowledges the receipt and sufficiency of consideration in exchange for Ironbeam's agreement to open this new account. Customer accepts and agrees to be obligated to all of the representations and terms and conditions contained within the existing account documentation, customer agreement and other agreement or acknowledgement of receipt of risk disclosures previously agreed to with Ironbeam or which are herein incorporated by reference.

Customer further represents that any additional account opened pursuant to this authorization is identical in all respects to the customer's existing account, except as otherwise disclosed to Ironbeam in writing, and further represents that there have been no material changes in customer's personal information or financial condition as previously disclosed in prior account documentation. Customer agrees that all of the trading in this account will be initiated by individuals authorized to trade for the account solely for the benefit of the account. Under no circumstances will the trading activity in this account be for the beneficial ownership or interest of other parties.

Customer is aware of CFTC Regulation 1.46 regarding the closing out of offsetting long and short positions. Customer acknowledges that his or her separate accounts will not contain long positions in one account ad offsetting short positions in another account unless such accounts are independently traded or unless one account is a Speculative Account and the other is a Hedge Account. A customer may not maintain more than one account for the purpose of holding open a long and short position in the same futures or options contract. The undersigned represents that the trading in this account will not violate the provisions of CFTC Regulation 1.46 and corresponding exchange regulations. Hedge accounts may be long or short the same contract provided the positions are bona fide hedge positions and a signed Hedge Representation Letter is on file. Accounts of exchange members may be long and short the same position, provided are part of an exchange recognized spread – reversals, conversions, etc. In any event, Customer understands that positions in separate accounts cannot be transferred from one account to the other if such transfer would result in and offsetting transaction.

Customer Account Name:	State Purpose for Additional Account(s):
Fyicking Account the	
Existing Account #:	
New Account #:	
All account holders must sign.	
Signature 1	Signature 2
X	X
Print Name	Print Name
Date	Date
Ironbeam Approval:	
<u>Signature</u>	Date
X	

HEDGE AGREEMENT Note: This form is for Hedge Customers ONLY. Subject in all respects to the Customer Agreement, the Customer named below ("Customer") certifies that all positions in this account will represent bona fide hedges, as that term is defined by Regulation Section 1.3(z) of the Commodity Futures Trading Commission ("CFTC"). All positions in this account will related to the commodities listed below, in contracts commercially equivalent or related to the commodities listed below, or as confirmed by Customer in a written statement filed pursuant to CFTC Regulation Section 1.47. Customer will initiate such positions and will use them to offset or reduce price risks as an integral part of Customer's business. **List Commodities:** Customer's business of is the reason this Customer is hedging the commodities listed above. Customer understands that its transactions in commodities other than those listed here will be subject to position limits established by the CFTC or an exchange and will be charge speculative margins. Customer agrees to notify Ironbeam, Inc. ("Ironbeam") promptly of any change in its business activities or the purpose of trading in its account affecting the designation of the positions in the commodities identified above as bona fide hedging positions. Customer also agrees to provide Ironbeam with verification of the foregoing from time to time upon request. This certification is effective until the Customer revokes it in writing or Ironbeam receives contrary instructions from the Customer. Notice Pursuant to CFTC Regulation Section 190.06: Please read carefully and initial one of the options below. These instructions apply in the unlikely event of an FCM's insolvency. Customer understands that the CFTC requires Ironbeam to give every hedging customer an opportunity to specify whether, in the unlikely event of Ironbeam's insolvency, the Customer prefers that open commodity contracts held in its hedging account be liquidated by the trustee in bankruptcy without first seeking customer instructions. Liquidate by the Bankruptcy Trustee without further instructions from Customer Seek further instructions from Customer regarding liquidation or transfer All account holders must sign. Signature 1 Signature 2 **Print Name Print Name** Date

ADDITIONAL RISK DISCLOSURE

If any of the following criteria apply to any or all applicant(s), this disclosure must be read and signed by all parties:

- Applicant has less than 1 year futures trading experience or less than 2 years stock trading experience
- ❖ Applicant is less than (25) years of age or over (65) years of age
- Applicant's annual income is less than \$25,000.00 per year
- Applicant's Net Worth is less than \$50,000.00
- Applicant is unemployed or retired
- The amount of funds applicant has committed to his Futures/Options Account with Ironbeam may be overly substantial in relation to his or her annual income and/or net worth
- Based on applicant's personal information and investment experience (or apparent lack thereof), futures/options trading might be too risky of an investment strategy

Based on these criteria, Ironbeam, Inc. is providing you with the following Additional Risk Disclosure:

IN ADDITION TO THE STANDARD INDUSTRY RISK DISCLOSURES FOUND IN IRONBEAM'S ACCOUNT APPLICATION, ALL PARTIES ASSOCIATED WITH THIS ACCOUNT SHOULD BE AWARE THAT COMMODITY FUTURES AND OPTIONS TRADING IS CONSIDERED TO BE A RISKY FORM OF INVESTMENT. IF YOU HAVE PURSUED ONLY CONSERVATIVE FORMS OF INVESTMENT IN THE PAST. YOU MAY WISH TO STUDY FUTURES AND OPTIONS TRADING FURTHER BEFORE CONSIDERING AN INVESTMENT OF THIS NATURE. YOU MUST REALIZE THAT IF YOU TRADE COMMODITY FUTURES AND OPTIONS ON FUTURES AND THE MARKET MOVES AGAINST YOUR INVESTMENTS, YOU COULD SUSTAIN A TOTAL LOSS OF ALL FUNDS DEPOSITED WITH IRONBEAM, INC. AS INITIAL MARGIN, AS WELL AS SUBSTANTIAL AMOUNTS OF ADDITIONAL CAPITAL REQUIRED TO MARGIN YOUR POSITIONS. YOU MAY BE REQUIRED TO MAKE ADDITIONAL DEPOSITS TO MAINTAIN THE ACCOUNT OR TO SATISFY A DEBIT BALANCE IN THE ACCOUNT. IF YOU CANNOT DEPOSIT ADDITIONAL FUNDS, YOUR POSITION(S) COULD BE LIQUIDATED AT A LOSS FOR WHICH YOU WILL BE RESPONSIBLE. YOU MUST ALSO REALIZE THAT WHEN LIMITED RISK IS MENTIONED IN CONNECTION WITH BUYING OPTIONS, IT MEANS THAT THE INVESTOR COULD LOSE THE ENTIRE PREMIUM TO PURCHASE THE OPTIONS CONTRACTS, PLUS ALL COMMISSIONS AND FEES (BUT NO MORE) SHOULD THE OPTIONS EXPIRE WORTHLESS. IF YOU WISH TO CONTINUE IN OPENING AN ACCOUNT WITH IRONBEAM, YOU ACKNOWLEDGE THAT THE FUNDS YOU HAVE COMMITTED TO TRADING ARE PURELY RISK CAPITAL AND THAT SUCH INVESTMENT WILL NOT MATERIALLY AFFECT YOUR LIFESTYLE, NOR WILL IT DETRACT FROM YOUR RETIREMENT PROGRAM. YOU FURTHER ACKNOWLEDGE THAT YOU FULLY UNDERSTAND THE NATURE OF SUCH INVESTMENT IN FUTURES AND OPTIONS, THE RISKS INVOLVED AND THAT YOUR OBLIGATIONS TO OTHERS WILL NOT BE NEGLECTED, DISREGARDED OR IMPAIRED BY POSSIBLE LOSS OF FUNDS INVESTED.

I ACKNOWLEDGE THAT I HAVE RECEIVED, READ, AND UNDERSTOOD THE ABOVE ADDITIONAL RISK DISCLOSURE STATEMENT.

<u>Individual</u>	If Joint:
X	X
Print Name	Print Name
Date	Date

DISCRETIONARY ACCOUNT AGREEMENT

			ES CONTRACTS, OPTIONS ON COMMODITY FUTURES CONTRACTS, FOREIGN UTURES CONTRACTS" AND "OPTIONS") IN YOUR NAME WITHOUT LIMITATION.
and mar here con or b	attorney-in-fact, to buy and sell (including short sales) and oth ket, and foreign futures and futures options, of every kind are eafter in accordance with your terms and conditions for the ultract market or its clearing house where executed, it being und broker. The undersigned hereby agrees to indemnify and hold year.	, (Cu nerwise deal nd nature on ndersigned's lerstood that you harmless	stomer must insert name of account controller) to act as my agent in commodity futures contracts, or physicals, traded on a contract margin or otherwise all in his or her sole discretion and now or account and risk and in the undersigned's name and those of the any such transaction may be effected through you acting as agent from, and to pay you promptly on demand for, any and all losses, the account and risk of the undersigned and debit balances due
the sam all de exemple by the allo pure add	undersigned's account with you; and the agent is authorized to force and effect as the undersigned might or could do with resther things necessary or incidental to the furtherance or condicuting broker as described herein, the undersigned hereby ratificated to the undersigned. Undersigned agrees to indemnify a suant to this Trading Authorization between the date of my described agrees to indemnify a suant to this Trading Authorization between the date of my described agrees.	to act for and espect to such luct of such to ies and confire knowledge the and hold Iron ath and your	ove named agent and attorney-in-fact in every respect concerning d on behalf of the undersigned in the same manner and with the n transactions (purchases, sales, trades), as well with the respect to ransactions. In consideration for Ironbeam, Inc. agreeing to act as ms any and all transactions with you heretofore or hereafter made nat these transactions may be executed orders will subsequently be beam, Inc. harmless in respect of all transactions effected by you first written notice thereof. This authorization and indemnity is in der any other agreement or agreements between the undersigned
note add emarker revolution all parts and and	withstanding the incompetence or other disability of the under ressed to you and received at your offices at 141 W. Jackson E all to compliance@ironbeam.com . Such revocation shall not a pocation. However, if the above named agent is representative beam Inc., you are authorized, in your complete discretion, to complete and authority granted to the agent hereby as termina cellation, by the undersigned or by you, shall effect any liability indemnity shall insure to the benefit of your present corporation change or changes at any time in the personnel thereof from	signed, until Blvd., Suite #2 ffect any liab e of Ironbear cancel any ou ited; provide in any way re on and any su	this document. This authority shall, remain in full force and effect, it is revoked or terminated by the undersigned by a written notice 2600, Chicago, Illinois 60604, Attn: Compliance Department, or via bility in any way resulting from transactions initiated prior to such m, Inc., and for any reason shall cease to be a representative of atstanding orders made by the agent on my behalf, and to consider d, however, that no such expiration, revocation, termination, or esulting from transactions initiated prior thereto. This authorization accessor firm or firms, corporations or corporations, irrespective of whatsoever, and the assigns of your present firm or any successor
and unti heir by t	to be performed entirely within the State of Illinois. The unde I an officer of Ironbeam Inc. shall have indicated approval. TI's successors, and assigns of the undersigned. Undersigned un he actions of the individual or organization named above and y	rsigned agree his Trading A derstands that our firm does I NO ADDITIO	rith the laws of the State of Illinois applicable to agreements made es that this Trading Authorization shall not be effective unless and uthorization shall be binding upon the executors, administrators, at your firm is in no way responsible for any loss to me occasioned is not, by implications or otherwise, endorse the operating methods DNAL WRITTEN OR ORAL INSTRUCTIONS TO THE ABOVE NAMED RESTRICT THIS TRADING AUTHORIZATION IN ANY WAY.
All	account holders must sign. This form is a contractual agreemen	t. Do not sig	n below until you have read this agreement carefully.
	Signature 1		Signature 2
	X		X
	Print Name	1	Print Name
	Title		Title
	Date		Date

AUTHORIZATION TO REMIT FUNDS

Sign below if you wish to authorize your Commodity Trading Advisor (who must be registered as such with the National Futures Association) to automatically receive fee payment from your account.

Authorization to Remit Funds

Customer hereby authorizes Ironbeam, Inc. to remit funds from my trading account upon the written presentation and demand of my Commodity Trading Advisor ("CTA"), as represented by a billing of said CTA. Ironbeam, Inc. shall not be held responsible for verification of the accuracy of such billing statement or the accuracy of whether fees are charged in accordance with the applicable disclosure document signed by Customer.

Notwithstanding anything in this authorization to the contrary, Ironbeam, Inc. shall have the right to refuse the written demand of the CTA if it is deemed by Ironbeam, Inc. in its sole discretion that such a transaction would affect proper margining requirements or would otherwise not be in the interest of the undersigned.

All account holders must sign. This form is a contractual agreement. Do not sign below until you have read this agreement carefully.

Signature 1	Signature 2
X	Х
Print Name	Print Name
Title	Title
Date	Date

MANAGED ACCOUNT CONTROLLER STATEMENT AND CUSTOMER ACKNOWLEDGEMENT **Managed Account Controller Information: Account Number:** Account Name: Relationship to Controller Name: Account Owner: Address: City: State: Zip: Telephone #: Fax: Manager's SSN Occupation/Employer: or Tax ID# (TIN): Nature of Business: **Managed Account Controller Statement:** If your account is managed by an exempt Commodity Trading Advisor ("CTA"), then please have the account controller choose from one of the reasons below, explaining why the account controller is not required to provide a disclosure document to the customer. I am not required to provide a disclosure document to my customer because I am exempt from registering as a CTA as indicated below: (Check the exemption which applies) The account owner is a family member. I have provided advice to 15 or fewer persons during the previous 12 months and do not hold myself out to the public as a CTA. I am a (1) dealer, processor, broker or seller in cash market transactions or (2) non-profit, voluntary membership, general farm organization, who provides advice on the sale or purchase of commodities, and any trading advice is solely incidental to the conduct of my I am registered in another capacity and my advice is solely incidental to my principal business or profession. I am a foreign-based entity, located outside the U.S. and I/we only solicit non-U.S. citizens. **Signature** Date Χ Account Controller **Customer Acknowledgement:** I acknowledge that my account controller is not registered as a Commodity Trading Advisor and is not required to provide me with a disclosure document for the reason indicated above. (All account holders must sign.) Signature 1 Signature 2 **Print Name Print Name** Date Date

NOTICE TO FOREIGN BROKERS AND FOREIGN TRADERS

If Customer is a non-resident of the United States*, please read the following notice for foreign traders and complete the applicable W-8 Tax Form in Section 3.

Please be advised that Regulation 15:05 of the United States Code of Federal Regulations (CFR) establishes Ironbeam, Inc. ("Ironbeam") as your Agent for purposes of accepting delivery and service of any communication issued by or on behalf of the Commodity Futures Trading Commission ("CFTC") to you as a foreign broker or foreign trader with respect to any futures or options contracts which are or have been maintained in your account(s) or the accounts of customer who have an interest in the account of a foreign broker and carried by Ironbeam. Service or delivery of any communication issued by or on behalf of the CFTC to Ironbeam pursuant to such agency constitutes valid and effective service or delivery upon the foreign broker, the customer of a foreign broker or the foreign trader. Also, pursuant to this regulation, in addition to Ironbeam acting as your agent, your introducing broker, if your account was introduced to Ironbeam, shall also be deemed to be your agent for purposes of service and/or delivery of communication.

You should be aware that the rules also provide that an agent, domiciled in the U.S., other than Ironbeam may be designated by you. Such alternate designation of agency must be evidenced by written agreement which you must provide to Ironbeam and which Ironbeam, in turn, must forward to the CFTC. If you wish to designate an agent other than Ironbeam, please contact the Compliance Department of Ironbeam in writing. If you do not designate another agent, Ironbeam will be your designated agent for CFTC communications. You should consult Title 17 CFR §15.05 for a more complete explanation of the foregoing.

In addition, the CFTC has issued a regulation requiring futures commission merchants, foreign brokers and foreign traders to respond to special calls by the CFTC for information regarding their futures and options trading. Ironbeam is similarly required to notify all foreign brokers and foreign traders of the requirements of this regulation. This regulation provides for the issuance of a special call by the CFTC for information from foreign brokers or foreign traders for whom a futures commission merchant, such as Ironbeam, makes or causes to be made a futures or options on futures transaction. Such special calls are limited to instances where the CFTC needs information promptly and where books and records of the futures commission merchant, trader or foreign broker upon whom the special call is made are not open at all times to inspection in the U.S. by any representative of the CFTC. For the purposes of this regulation, Ironbeam will be considered your agent and may be required to submit such special call by an expeditious means of communication to you, unless you have made an alternative designation as discussed above. Foreign brokers and foreign traders are required to provide the CFTC the information specified in such a call. Ironbeam, Inc., as your agent, may be required to provide any and all information concerning your account as specified in the above cited regulation, including but not limited to your name and address and the name and address of any person having a ten percent or more beneficial interest in your account, the total open futures and options positions in your account and the number of futures contracts against which delivery notices have been issued or received or against which exchanges of futures for cash have been transacted for the period of time specified in the call. This regulation permits the CFTC to prohibit further trading in the contract market and in the delivery months or options expiration dates specified in the call, except for liquidation trading, if the special call is not responded to at the place and within the time required by the CFTC. The special call shall be limited to information relating to futures or options positions of the trader in the United States. Please consult Title 17 CFR §21.03 for more information.

The CFTC, pursuant to Title 17 CFR §15.03 has established specific reportable positions levels for all futures contracts. These contract quantities are subject to change at any time and you should consult your account executive at Ironbeam to determine the current quantities applicable to you. 17 CFR Part 17 requires each futures commission merchant and foreign broker to submit a report to the CFTC with respect to each account carried by such futures commission merchant or foreign broker, which contains a reportable futures position. In addition, 17 CFR Part 18 requires all traders including foreign traders to file a report with the CFTC within one day after the special call upon such a trader by the CFTC. You should consult 17 CFR Parts 17 and 18 for more complete information with respect to the foregoing.

The undersigned hereby acknowledge receipt of the above Notice To Foreign Brokers and Foreign Traders, and affirm that I/we have read and understood the contents of each of these notices.

All account holders must sign. This form is a contractual agreement. Do not sign below until you have read this agreement carefully

Signature 1		Signature 2
Х		X
Print Name	Ι Γ	Print Name
Date	г	Date

*A non-resident of the United States includes a natural person not resident in the United States, a foreign corporation, a foreign partnership, a foreign trust, a foreign estate, a pension plan for the employees or principals of an entity formed and with its principal place of business outside the U.S. and a foreign entity organized for passive investment such as a pool or investment company, 10% or less of whose equity interests are owned by "qualified eligible persons" who are residents of the U.S. A payment to a U.S. branch of a foreign institution is a payment to foreign person.

Exhibit A to Schedule 4: Non Professional Self-Certification Form

Based on the Subscriber's qualifications, Subscribers may be charged reduced Fees for Information. To qualify for the reduction in Subscriber Fees, Subscriber must be considered a "Non-Professional."

Non-Professional shall mean and include either (i) an individual, natural person Subscriber(s) who, or (ii) certain small business entities (limited liability companies, partnerships, trusts or corporations) that, receive and use Information (excluding any pit traded data), in each case subject to the following restrictions:

The Non-Professional Subscriber

- (a) the Subscriber must have an active futures trading account;
- (b) the Subscriber must not be a member (or hold or lease any type membership) of any exchange;
- (c) the Subscriber does not have a primary business purpose that involves trading;
- (d) the Subscriber must not be registered or qualified as a professional trader or investment adviser with any stock, commodities or futures exchange or contract market, or with any regulatory authority, professional association or recognized professional body; and
- (e) the Subscriber must not be affiliated with any entity that is or may be considered a Professional User; and

The Non-Professional Subscriber's Use of Information

- (f) the Subscriber's use of Information must be solely for the Subscriber's personal, nonbusiness use;
- (g) the Subscriber's use of Information must be limited to managing the Subscriber's own property and, for the avoidance of doubt, not in connection with the management of any property of any third party(ies) in any capacity, whether as a principal, officer, partner, employee or agent of any business or on behalf of any other individual, and whether or not the Subscriber receives any remuneration therefore; and
- (h) the Subscriber must not be acting on behalf of an institution that engages in brokerage, banking, investment, or financial activities; and

The Non-Professional Subscriber's Access to Information

- (i) the Subscriber has no more than two (2) means for accessing Information from each Distributor; and
- (j) the Subscriber must view the Information only on a device that is capable of routing orders to the CME Globex Platform (an "Order Routing Device").

Any Subscriber who does not meet the qualifications of a Non-Professional or falls under the categories described below shall be considered a Professional. Notwithstanding anything else herein, Professionals shall include, without limitation:

Any person or entity that provides financial or similar services to any third party.

Exhibit A to Schedule 4: Non Professional Self-Certification Form

- Any person that is registered or qualified as a professional trader or investment adviser with any stock, commodities or futures exchange or contract market, or with any regulatory authority, professional association or recognized professional body.
- Any person or entity that acts on behalf of an institution that engages in brokerage, banking, investment or financial activities.
- Any person or employee of an entity that holds any form of membership at any of the CME Group Designated Contract Markets ("DCM") or any other exchange.

Notwithstanding anything herein, CME reserves the right in all cases to make a final determination as to whether a Subscriber is a Non Professional or a Professional. CME reserves the right to amend this policy or terminate reduced for fees for Non-Professionals at any time.

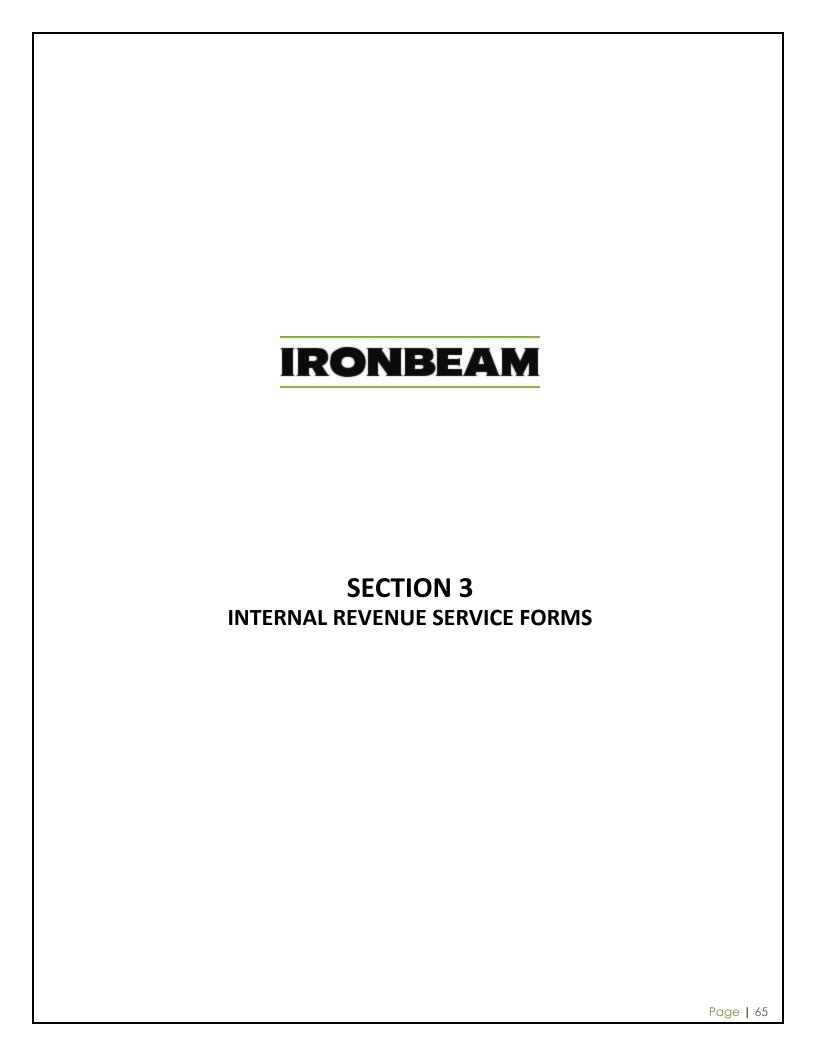
Subscribers who qualify as Non-Professionals should sign below and return this Self-Certification form to Distributor. Please note that this form may be subject to Distributor's review and approval. Subscriber must notify Distributor as soon as is reasonably practicable in the event that Subscriber no longer qualifies as a Non-Professional.

I hereby certify that I qualify as a Non-Professional pursuant to the definition described herein:

Signature: _		
Name:		

SUBSCRIBER

Date: _



INTERNAL REVENUE SERVICE (IRS) TAX FORMS INSTRUCTION GUIDE

See www.irs.gov for detailed instructions on filling out the following forms that may apply to you.

For U.S. Applicants:

Each U.S. Applicant must complete the IRS Form W-9 Certification in full.

IRS Form W-9: Request for Taxpayer Identification Number and Certification

Note: Please ensure that you select the appropriate box for federal tax classification on the form. For all Limited Liability Company accounts, you must also select the tax classification code -C, S, or P.

For Non-U.S. Applicants:

Attached for your convenience is IRS Form W-8BEN: Certificate of Foreign Status of Beneficial Owner for United States Tax Withholding.

IRS Form W-8BEN: Certificate of Foreign Status of Beneficial Owner for United States Tax Withholding *Use this form if applicant is:*

- A beneficial owner solely claiming foreign status or treaty benefits
- A foreign partnership or foreign trust (may also be a W-8IMY see instructions unless claiming an exemption from U.S. withholding
 on income effectively connected with the conduct of a trade or business in the U.S.)
- A hybrid entity claiming treaty benefits on its own behalf
- A disregarded entity instead the single foreign owner should use this form or the W-8ECI
- Any foreign government or other foreign organization that is not claiming the applicability of section(s) 115(2), 501(c), 892, 895 or 1443(b) (may also be a W-8ECI for – see instructions)

If you are not sure which form is applicable to your status, please visit <u>www.irs.gov</u> for detailed instructions on filling out the following forms if they apply to you. All Non-U.S. Applicants must complete one of the following certifications in full.

- IRS Form W-8BEN: Certificate of Foreign Status of Beneficial Owner for United States Tax Withholding
- IRS Form W-8ECI: Certificate of Foreign Person's Claim That Income is Effectively Connected with the Conduct of a Trade or Business in the United States. Note persons submitting this form must file an annual U.S. income tax return to report income claimed to be effectively connected with a U.S. Trade or business.
- IRS Form W-8EXP: Certificate of Foreign Government or Other Foreign Organization for United States Tax Withholding
- IRS Form W-8IMY: Certificate of Foreign Intermediary, Foreign Flow-Through Entity, or Certain U.S. Branches for United States Tax Withholding



Request for Taxpayer Identification Number and Certification

Give Form to the requester. Do not send to the IRS.

micornai	1110101	THE COLVINS									
	Nam	ne (as shown on your income tax return)									
Je 2.	Busi	Business name/disregarded entity name, if different from above									
on pag	Check appropriate box for federal tax classification: Individual/sole proprietor C Corporation S Corporation Partnership Trust/estate				E	Exemptions (see instructions):					
/pe ions				E:	Exempt payee code (if any)						
Print or type See Specific Instructions on page	☐ Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=partnership) ►			-	Exemption from FATCA reporting code (if any)				1		
F Z		Other (see instructions) ▶					_				
pecific	Add	ress (number, street, and apt. or suite no.)	Requeste	r's nam	e and	addres	s (opti	ional)			
See S	City	, state, and ZIP code									
	List	account number(s) here (optional)									
Par	t I	Taxpayer Identification Number (TIN)									
Enter	your	TIN in the appropriate box. The TIN provided must match the name given on the "Name"	" line	Social s	secur	ity num	ber				
to avo	oid ba	ackup withholding. For individuals, this is your social security number (SSN). However, fo	ra 🗍								
		en, sole proprietor, or disregarded entity, see the Part I instructions on page 3. For other				-		-			
		s your employer identification number (EIN). If you do not have a number, see <i>How to ge</i>	eta L					L			ш
T/N on page 3. Note: If the account is in more than one name, see the chart on page 4 for quidelines on whose. Employer identification number						1					
numbe		e account is in more than one name, see the chart on page 4 for guidelines on whose	F.		1 [T 1		·	T]
TIGITIO	ei io	enter.			-						
Par		Certification									
Under	r pena	alties of perjury, I certify that:									
1. The	e nun	nber shown on this form is my correct taxpayer identification number (or I am waiting for	a numbe	r to be	issu	ed to n	ne), aı	nd			
2. 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 ar	m a l	J.S. citizen or other U.S. person (defined below), and									
4. The	FAT	CA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting	ng is corre	ct.							
becau interes genera	ise yo st pai ally, p	on instructions. You must cross out item 2 above if you have been notified by the IRS the pulsar have failed to report all interest and dividends on your tax return. For real estate transition, acquisition or abandonment of secured property, cancellation of debt, contributions to be asymments other than interest and dividends, you are not required to sign the certifications on page 3.	actions, it o an indiv	em 2 c idual r	does etirer	not app ment ar	oly. F	or mo emen	ortgag t (IRA	je), and	t
Sign Here		Signature of U.S. person ► Da	ate ▶								

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
- 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) Page **2**

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 qualifies for the exemption from tax.
- 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 allen 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, enter the first owner that is not disregarded for 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) Page **3**

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
- $4\!-\!\mathrm{A}$ 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
- $7\!-\!\text{A}$ futures commission merchant registered with the Commodity Futures Trading Commission
 - 8-A real estate investment trust
- $9-\!$ 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		

¹ See Form 1099-MISC, Miscellaneous Income, and its instructions.

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)
 - $\ensuremath{\mathsf{B-The}}$ 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 1040
- 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 ITIN, 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.

 $\begin{tabular}{ll} \textbf{Signature requirements.} Complete the certification as indicated in items 1 through 5 below. \end{tabular}$

- 1. 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.
- ${\bf 3.}$ 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.

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.

Form W-9 (Rev. 8-2013) Page **4**

What Name and Number To Give the Requester

what name and number to give the nequester					
For this type of account:	Give name and SSN of:				
Individual Two or more individuals (joint account)	The individual The actual owner of the account or, if combined funds, the first individual on the account '				
Custodian account of a minor (Uniform Gift to Minors Act)	The minor ²				
4. 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	The grantor-trustee ' The actual owner '				
Sole proprietorship or disregarded entity owned by an individual	The owner ³				
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:				
7. Disregarded entity not owned by an individual	The owner				
8. A valid trust, estate, or pension trust	Legal entity ⁴				
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				
14. 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.

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 <code>phishing@irs.gov</code>. 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: <code>spam@uce.gov</code> or contact them at <code>www.ftc.gov/idtheft</code> 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.

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.

⁴List 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 *Special rules for partnerships* on page 1.

^{*}Note. Grantor also must provide a Form W-9 to trustee of trust.

Form W-8BEN

(Rev. February 2006)

Certificate of Foreign Status of Beneficial Owner for United States Tax Withholding

Department of the Treasury

(Please attach a separate, signed statement if any information has changed)

Signature of the beneficial owner

OMB No. 1545-1621

.....

Capacity in which acting

Section references are to the Internal Revenue Code.
 See separate instructions.
 Give this form to the withholding agent or paver. Do not send to the IRS.

Interna	Revenue Service	e IRS.
Do no	ot use this form for:	Instead, use Form:
	J.S. citizen or other U.S. person, including a resident alien individual	W-9
	person claiming that income is effectively connected with the conduct a trade or business in the United States	W-8ECI
	oreign partnership, a foreign simple trust, or a foreign grantor trust (see instructions for exceptions).	
	oreign government, international organization, foreign central bank of issue, foreign tax-exempt organi	
for	eign private foundation, or government of a U.S. possession that received effectively connected incoming the applicability of section(s) 115(2) 501(c) 892 895 or 1443(b) (see instructions)	ne or that is
Note	iming the applicability of section(s) 115(2), 501(c), 892, 895, or 1443(b) (see instructions)	only to
claim	they are a foreign person exempt from backup withholding.	
• A p	person acting as an intermediary	W-8IMY
NOTE	. See Instructions for additional exceptions.	
Par	t I Identification of Beneficial Owner (See instructions.)	
1	Name of individual or organization that is the beneficial owner 2 C	ountry of incorporation or organization
3	Type of beneficial owner: Individual Corporation Disregarded entity	Partnership Simple trust
	Grantor trust Complex trust Estate Government	International organization
	Central bank of issue Tax-exempt organization Private foundation	
4	Permanent residence address (street, apt. or suite no., or rural route). Do not use a P.O. box or in-	are-of address.
	City or town, state or province. Include postal code where appropriate.	Country (do not abbreviate)
5	Mailing address (if different from above)	
	City or town, state or province. Include postal code where appropriate.	Country (do not abbreviate)
6		ax identifying number, if any (optional)
	☐ SSN or ITIN ☐ EIN	
D	Ole in a f Tay Tweete Danielte (if annile able)	
Par		
9	I certify that (check all that apply):	
а		veen the United States and that country.
b	If required, the U.S. taxpayer identification number is stated on line 6 (see instructions).	
С		
	applicable, meets the requirements of the treaty provision dealing with limitation on benefits (see	,
d	The beneficial owner is not an individual, is claiming treaty benefits for dividends received from a	• .
	U.S. trade or business of a foreign corporation, and meets qualified resident status (see instruction	,
е	The beneficial owner is related to the person obligated to pay the income within the meaning of second seco	
10	Special rates and conditions (if applicable—see instructions): The beneficial owner is claiming the provision	
	treaty identified on line 9a above to claim a % rate of withholding on (specify type of	income):
	Explain the reasons the beneficial owner meets the terms of the treaty article:	
Par	t III Certification	
	penalties of perjury, I declare that I have examined the information on this form and to the best of my knowledge and belief it is	strue, correct, and complete. I
	certify under penalties of perjury that: the beneficial owner (or am authorized to sign for the beneficial owner) of all the income to which this form relates,	
2 The	beneficial owner is not a U.S. person,	
	income to which this form relates is (a) not effectively connected with the conduct of a trade or business in the United States, (b) bject to tax under an income tax treaty, or (c) the partner's share of a partnership's effectively connected income, and	effectively connected but is
	broker transactions or barter exchanges, the beneficial owner is an exempt foreign person as defined in the instructions.	
C	anners I subhaving this favor to be presided to any withhalding appet that has popular vaccint as sucted, of the insert	area of which I are the baroficial access or
	nermore, I authorize this form to be provided to any withholding agent that has control, receipt, or custody of the inc withholding agent that can disburse or make payments of the income of which I am the beneficial owner.	ome of which fam the beneficial owner or
Siar	1 Here	
9'	Here Signature of beneficial owner (or individual authorized to sign for beneficial owner) Date (MM-	,
For F	Paperwork Reduction Act Notice, see separate instructions. Cat. No. 25047Z	Form W-8BEN (Rev. 2-2006)
	AFFIDAVIT FOR CALENDAR YEARS 200200_	
Und	er penalties of perjury, I declare that I have examined and signed the above Form W-8BEN and that the infor	mation and certifications contained
	ein remained the same and unchanged throughout calendar years 200 through 200, and were true, correct	

Date (DD-MM-YYYY)