

222 South Riverside Plaza, Suite 900 Chicago, IL 60606

The process of trading begins with your completing at least one set of account forms.

This Application contains a contract (the "Account Agreement") through which you agree to assume certain contractual obligations and contractually waive certain rights. Accordingly, this Account Application, including the Account Agreement, MUST BE READ CAREFULLY and signed by EVERY Customer trading "Contracts" (as defined in the Account Agreement) through R.J. O'Brien & Associates, LLC ("R.J. O'Brien"). Original agreements must be completed and returned to your broker. Customers may print out account agreements from the Internet and send original signed documentation back to broker.

Please be sure that you read and understand everything in this Application. Fill it out fully and legibly, signing and dating, in ink, where required. Otherwise, the opening of your account may be delayed. A new account can be traded only when the Application and initial funds are accepted in, and the Application is approved by, R.J. O'Brien's Chicago office.

SINCE TRADES INVOLVE AN IMMEDIATE OBLIGATION BY R.J. O'BRIEN TO THE EXCHANGES ON WHICH YOU TRADE, UNLESS OTHER ARRANGEMENTS HAVE BEEN MADE, YOUR TRADING CAN BEGIN ONLY WHEN CLEARED FUNDS ARE RECEIVED BY R.J. O'BRIEN, IN THE FORM OF:

- A.) A **bank wire** to the Harris Trust & Savings Bank of Chicago for the account of R.J. O'Brien & Associates, LLC, Customer Segregated Account 367-171-6. The ABA routing, if necessary, is 071-000 -288. (Be sure to include your name as it appears on your account agreement and also your complete account number);
- B.) A **certified check or cashier's check** made payable to R.J. O'Brien. If this is a new account, personal checks, money market checks and savings and loan checks may require clearance before you can trade. In addition, the originating source of all funds coming into the account must match the name on the account;
- C.) **TRANSFER of funds and/or existing positions** to your account from another firm. When transferring an account, please fill out the Account Transfer Form in the back of this booklet, return it to R.J. O'Brien with all other required documents (via your Introducing Broker, if any), and R.J. O'Brien will apply positions and funds to your account accordingly.

WHEN YOUR ACCOUNT IS OPEN AND TRADING, READ YOUR STATEMENTS CAREFULLY, AS SOON AS THEY ARE RECEIVED. If you plan to be away, check in with your broker frequently! *Do not delay reviewing your trading status*. If you have ANY questions about an individual trade or your balance or position, either phone your account representative (broker) immediately, or if he or she is unavailable or a problem is not resolved at once, call the R.J. O'Brien Compliance staff in Chicago at 312-373-5000.

ATTENTION: Please make a copy of this entire account application for your records.



INSTRUCTIONS FOR ACCOUNT FORMS

Risk Disclosure Statement for Futures and Options.	1
(All customers must sign this CFTC Risk Disclosure.)	
Privacy Policy	3
(Please review.)	
Notice to Customers	3
(Please review.)	
Account Applications	4
(All customers must complete.)	
Account Agreement	6
(Please review and sign where applicable.)	
Voluntary Arbitration Agreement	16
(Please review and sign where applicable.)	
Request for Electronic Transmission of Customer Statements	17
(Must be signed by all customers requesting statements be sent to them electronically.)	
Hedge Representation	18
(All customers requesting bone fide hedge margins must complete and sign.)	
Introducing Broker Authorization	19
(All customers must sign.)	
Managed Account Agreement	20
(All customers authorizing a third party to trade their account must sign.)	
Exempt Commodity Trading Advisory Letter	22
(Must be completed if individual given power of attorney is neither a broker nor immediate family member or registered CTA/CPO.)	
Additional Risk Disclosure Statement(Please review and sign where applicable.)	23
Acknowledgment of Disclosures	24
Disclosure Letter Regarding Settlement, Carrying and Clearing of Contracts Listed on the London Meta Exchange ("LME") (All customers must sign)	
Internal Revenue Code Substitute Form W-9.	27
(All customers must sign.)	
Account Transfer Form(Please sign if applicable.)	28



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.

 Continued on Next Page.

Rev 8/12R 1 ESTABLISHED IN 1914



Date

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.rjobrien.com/about/firmdisclosures. Please note: The Commodity Futures Trading Commission has determined that the firm specific disclosures and financial information referenced in this paragraph 12 are not required to be made available until July 12, 2014. We will advise you when the information is available on our Web site.

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.

If Individual or Joint Account:

Joint Party Signature

Date

Joint Party Signature

Rev 8/12R 2 ESTABLISHED IN 1914



R.J. O'BRIEN'S PRIVACY POLICY

R.J. O'Brien & Associates, LLC and its affiliates (collectively, "R.J. O'Brien" or we or us) and your Introducing Broker (if applicable) believe in respecting the privacy and security of your personal information. Please read this Privacy Policy carefully.

We do not disclose any nonpublic personal information about our customers or former customers to anyone, except as permitted by law.

Collection of Information

We may collect personally identifiable information ("PII") about you from the following sources:

- Information we receive from you on applications or other forms;
- Information from communication and interactions that we have with you;
- Information from third parties who provide consumer information or verify consumer relationships;
- Information about your transactions with us, our affiliates or others;
- Information we receive from a consumer reporting agency; and
- Information about you that we obtain through an information collecting device from a web server.

PII includes any information by which you can be personally identified, and may include your name, address, age, date of birth, electronic mail address, occupation, employment information, telephone number, education, the kind of service provided to you, credit card number, and other similar information.

Use and Disclosure of Your Information

We may use and/or share your PII for the following reasons:

- To contact you in response to your inquiries, comments and suggestions;
- To contact you otherwise when necessary;
- For the specific purpose for which it was volunteered;
- To complete any transactions you may perform with or through us;
- To be provided to R.J. O'Brien's third parties in connection with the legitimate business purposes of R.J. O'Brien or the site;
- To third parties for the legitimate business purposes of those third parties;
- To third parties that assist us with preparing and processing orders and statements;
- To generate aggregate statistical studies;
- As required by law or regulation, or as requested by government authorities, or for the protection of persons or property;
- In connection with an acquisition, merger, restructuring, sale or other transfer involving all or any portion of the business; and
- For other business purposes.

Confidentiality and Security

We restrict access to your PII to those employees who need to know that information to provide products or services to you. We maintain physical, electronic and procedural safeguards to guard your PII. However, due to the design of the Internet, we cannot guarantee that communications between you and our servers will be free from unauthorized access by third parties. Furthermore, your individual broker may be provided your PII.

USA Patriot Act: Notice to Customers

To help the government fight the funding of terrorism and money laundering activities, Federal law requires all financial institutions to obtain, verify, and record information that identifies each person who opens an account.

What this means for you: When you open an account, we will ask for your name, address, date of birth and other information that will allow us to identify you. We may also ask to see your driver's license or other identifying documents.



FOR OFFICE USE ONLY ACCOUNT APPLICATION (Please type, or print legibly and fully in ink) Office / Sales Code / Account Number SSF Risk Disclosure provided on: Commission (RT) SSF Risk Disclosure provided via: U.S. Mail E - - Mail Social Security / Fed. ID # Legal Account Name: Date of Birth Account Owner (s): # of Dependents: Permanent street address is required (no P.O. Boxes): Street Address City Home E-mail State Zip+4 Mailing Address (if different from above): Street Address City State Zip+4 Day time Phone Home Phone Fax Phone Work E-mail Name and address of Employer Occupation/Position Nature of Business (If retired, please so indicate and list prior occupation) Name of Broker/Contact who solicited you for this application Marital Status: Are you a: U. S. Citizen: Type of Account □ Yes □ Corporate □ IRA Speculator □ Individual/Joint Married □ No □ LLC Hedger □ Trust Single □ General Partnership □ Discretionary □ LLP Divorced □ Limited Partnership **FINANCIALS** Current Banking Information: Bank Annual Income \$ City Net Worth Account # Liquid Net Worth For Corporations: attach a copy of most recent audited financial statement. INVESTMENT EXPERIENCE Stocks/Bonds: Commodity Options: Commodity Funds: Futures: ☐ Yes □ Yes □ Yes If yes, please list accounts: □ No □ No □ No Closed Open □ No _Years ___Years Years Years Firm Name Do you have an existing securities or forex account? If yes, list: Yes Type Brokerage Firm Account # □ Yes □ No Do you have any unsatisfied debit balance (s) with RJO or with any other commodities/securities firm? □ Yes □ No Does any other person have authority to trade this account? □ Yes □ No Are you a "control person" or "affiliate" of a public company as defined in SEC Rule 144? This would include, but is not necessarily limited to, 10% shareholders, policy-making executives, and members of the Board of Directors. □ Yes □ No Are you an employee or member of any futures or securities exchange, NFA, NASD; a member firm of either of those entities or an employee of RJO? □ Yes □ No Does this account owner control or have a financial interest in any other account with this firm? If yes, list: □ Yes □ No Have you ever been subject to bankruptcy proceedings, receivership or similar actions, voluntarily or involuntarily? If yes, list reason and date cleared: □ Yes □ No Have you ever been in a legal dispute or involved in arbitration proceedings, arising from a commodities or securities dispute? Trading Method (for Forex Customers only): Do you understand: □ Yes □ No Basics of Futures Trading? □ Trading Platform □ Yes □ No Risks of Loss and the Possibility of Incurring a Debit? □ Order Management System □ Other Elected Transmission □ Yes □ No RJO Margin Policy? (See Account Agreement, section 3) □ Yes □ No Is Futures Trading Suitable for you? Do you understand (for forex customers only): □ Yes □ No Basics of Forex Trading? Applicant Signature Date 4

Rev 8/12R

□ Yes □ No

□ Yes □ No □ Yes □ No Is Forex Trading Suitable for you?

Leverage and Margin in Forex Trading?



JOINT ACCOUNT FORM

□ Yes Type of	□ No Account:	Is this a Joint	account? (If YI	ES, please compl	lete below.)				
		th Rights of Si	ırvivorship (JT	WROS) - Jo	oint Tenants in	n Common ((JTIC)		
Individual	of Joint Accou	ınt				Social Se	ecurity / Fed. ID #	:	
Street Add	lress (no P.O. I	Boxes)	City		State	Zip+4		Home E-mail	
	Account Owner (s):		# of Dependents:		lents:	_	Date of Birth or	Date of Birth or formation of business entity	
Daytime P	hone		Home Phone		Fax Phone		Wor	k E-mail	
Marit	al Status: Married Single Divorced			ress of Employer:		<u>Occu</u>	pation/Position:		
				FINA	NCIALS				
					Current Ban	king Inform	nation:		
\$ Annual 1					Bank				
\$					City				
Net Wo	Net Worth								
\$ Liquid N	Net Worth				Account #				
Diquiu i	, ee vy stell			INVESTMEN		NCE			
_									
<u>Fi</u>		Commodity C		Commodity Funds: Yes	□ Yes	Bonds:	If yes, please l		
	No _Years	□ No Years		□ No Years	□ No Year	S	Firm Name	□ 0	pen □Closed
□ Yes □ No	Do you have	an existing securi	ties or forex accour	nt? If yes, list:	e Brol	xerage Firm		Account #	
□ Yes □ No	Do you have	any unsatisfied de	ebit balance (s) with	RJO or with any of	her commodities	securities firm	1?		
□ Yes □ No	•		thority to trade this			440.00			
□ Yes □ No			'affiliate" of a publi members of the Bo		ed in SEC Rule 14	14? This would	d include, but is no	ot necessarily limi	ted to, 10% shareholders,
□ Yes □ No									
□ Yes □ No	Does this ac	count owner contr	ol or have a financia	al interest in any other	er account with the	nis firm? If y	ves, list:		
□ Yes □ No	Have you ever been subject to bankruptcy proceedings, receivership or similar actions, voluntarily or involuntarily? If yes, list reason and date cleared:								
□ Yes □ No	Have you ev	er been in a legal	dispute or involved	in arbitration procee	dings, arising fro	m a commodit	ies or securities d	ispute?	
Do you un	<u>.</u>			Trading	Method (for Fore	x Customers o	•		
□ Yes □ No □ Yes □ No □ Yes □ No	Risks of Los RJO Margin	Policy? (See Acco	ty of Incurring a De ount Agreement, see		_ v	oice Order Managen		Trading Platfor Other Elected T	
□ Yes □ No Do you unde		rading Suitable for rex customers only							
$\square_{Yes} \square_{No}$ $\square_{Yes} \square_{No}$	Basics of Fo Is Forex Tra	rex Customers only rex Trading? ding Suitable for y			X Joi	nt Applican	t Signature		Date
\square_{Yes} \square_{No} \square_{Yes} \square_{No}	EFPs? Leverage an	d Margin in Forex	Trading?		5				



ACCOUNT AGREEMENT

1. ACCOUNT STATUS

This Account Agreement ("Agreement") sets forth the terms and conditions upon which R.J. O'Brien & Associates, LLC ("R.J. O'Brien") will accept and maintain for the undersigned Customer one or more accounts and act as broker or dealer for Customer in the execution and clearance of orders for transactions (whether domestic or foreign) involving the purchase and sale of futures contracts; options on futures contracts; commodities and forward contracts, security futures contracts ("SSF"); option, spot and forward foreign exchange transactions; exchange for physicals ("EFPs"); and any other cash transaction or derivative, or any similar instruments which may be purchases, sold or cleared by or through an FCM (individually, a "Contract" and collectively, "Contracts"). Customer hereby represents that all responses made in connection with the Account Application and this Agreement are complete and correct, and that R.J. O'Brien will be informed of any material change in such data, including financial information.

If this account has been introduced to us, all references to us in this Agreement shall include your broker, and your broker shall enjoy all benefits and rights hereunder. Customer agrees and acknowledges that broker and R.J. O'Brien may share information with each other regarding or relating to Customer and/or Customer's account (s). Customer warrants to R.J. O'Brien that if Customer is an individual or if this is a joint account, Customer (s) is of legal age and of sound mind. Unless otherwise indicated in the Application, no one except the Customer (s) identified in the Account Application has an interest in the account (s). Customer agrees to permit verification of relevant information by R.J. O'Brien through third parties (including credit reporting entities). In any event, this Agreement and the account (s) permitted hereunder become effective only upon acceptance by an authorized representative of R.J. O'Brien at its principal office in Chicago, Illinois.

2. ACCOUNT RISKS

- A.) TRADING IN CONTRACTS IS HIGHLY SPECULATIVE AND IN NO SENSE MAY BE CONSIDERED A CONSERVATIVE INVESTMENT;
- B.) BECAUSE OF THE LOW MARGIN DEPOSITS NORMAL-LY UTILIZED AND THE VOLATILE PRICE MOVE-MENTS WHICH CAN OCCUR IN THE MARKETS FOR CONTRACTS, THE POSSIBILITY OF RAPID AND SUB-STANTIAL LOSSES IS CONTINUALLY PRESENT;
- C.) TRADING IN CONTRACTS IS APPROPRIATE ONLY FOR THOSE PERSONS FINANCIALLY ABLE TO WITH-STAND SUBSTANTIAL LOSSES, SOMETIMES GREAT-LY EXCEEDING THE VALUE OF THEIR MARGIN DEPOSITS: AND
- D.) NO ONE (INCLUDING FUTURES COMMISSION MER-CHANTS, ASSOCIATED PERSONS, INTRODUCING BROKERS, FUND MANAGERS, COM-MODITY TRADING ADVISORS OR POOL OPERA-TORS) CAN GUARANTEE PROFITS OR THE ABSENCE OF LOSSES. CUSTOMER AGREES TO PROMPTLY NO-TIFY THE R.J. O'BRIEN COMPLIANCE DEPARTMENT IF ANY SUCH GUARANTEE IS SUGGESTED.

3. MARGINS

All checks and funds from Customer, to be credited to Customer's account(s), must be payable only to "R.J. O'Brien". Customer

agrees at all times to maintain such margin in his account(s) as R.J. O'Brien may from time to time (at its sole discretion) require, and will meet all margin calls in a reasonable amount of time. Customer agrees that, if requested to do so, Customer will promptly wire-transfer such funds. Market conditions permitting, R.J. O'Brien agrees to make reasonable efforts to notify Customer of margin calls and/or deficiencies and to allow a reasonable period for Customer to provide funds.

FOR PURPOSES OF THIS AGREEMENT, A REASONABLE AMOUNT OF TIME SHALL BE DEEMED TO BE ONE (1) HOUR, OR LESS THAN ONE HOUR IF, IN R.J. O'BRIEN'S BUSINESS JUDGMENT, MARKET CONDITIONS WARRANT.

Customer further agrees that, notwithstanding anything in this Agreement to the contrary, in the event that the account (s) is under margined, has zero equity or is equity deficit at any time, or in the event that R.J. O'Brien is unable to contact Customer due to Customer's unavailability or due to a breakdown in electronic communications, R.J. O'Brien shall have the right to liquidate all or any part of Customer's positions through any means available, without prior notice to the Customer.

R.J. O'Brien may require margin in excess of that required by applicable law, regulation, exchange or clearinghouse minimums. Customer acknowledges that R.J. O'Brien has no obligation to establish uniform margin requirements among products or customers, that margins required by R.J. O'Brien may exceed the minimum margin requirements of the applicable exchange or clearinghouse, and that margin requirements may be increased or decreased from time to time in R.J. O'Brien's discretion, without advance notice to Customer. All deposits shall be deemed made only when cleared funds are actually received by R.J. O'Brien. If a check is not honored or paid by a bank upon presentment, R.J. O'Brien will immediately debit Customer's account for the amount of the returned check as well as any fees incurred.

Any failure by R.J. O'Brien to call for margin at any time shall not constitute a waiver of R.J. O'Brien's right to do so any time thereafter, nor shall such failure create any liability to the Customer. R.J. O'Brien shall not be liable to Customer for the loss or loss of use of any margin deposits option premiums, or other property, which is caused, directly or indirectly, by the failure or delay by any bank, trust company, exchange, clearing organization, other clearing broker or entity that is holding funds, securities, or other property to pay or deliver the same to R.J. O'Brien. R.J. O'Brien may, for any reason, require Customer to transfer its account (s) to another firm. If Customer does not transfer its positions promptly upon demand by R.J. O'Brien, R.J. O'Brien may liquidate the positions and Customer agrees to indemnify and hold R.J. O'Brien harmless from any and all losses resulting from such liquidation.

Customer acknowledges that R.J. O'Brien is hereby authorized, for its account and benefit, from time to time and without notice to Customer, either separately or with others, to lend, repledge, hypothecate or rehypothecate, either to itself or to others, any and all property (including but not limited to securities, commodities warehouse receipts or other negotiable instruments) held by Customer in any of its accounts and R.J. O'Brien shall not at any time be required to deliver to Customer such identical property but may fulfill its obligation by delivery of property of the same kind and amount.



4. LIQUIDATION OF ACCOUNTS

In the event of: (a) the death or judicial declaration of incompetency of Customer; (b) the filing of a petition in bankruptcy, or a petition for the appointment of a receiver; (c) the filing of an attachment against any of the Customer's account carried by R.J. O'Brien; (d) insufficient margin as determined by R.J. O'Brien in its sole discretion, or R.J. O'Brien's determination that any collateral deposited to protect one or more accounts of customer is inadequate, regardless of current market quotations, to secure the account; or (e) any other circumstances or developments that R.J. O'Brien deems to require action necessary for its protection, R.J. O'Brien is hereby authorized, according to its judgment and in its sole discretion, to take one or more of any portion of the following actions: (1) satisfy any obligation Customer may have to R.J. O'Brien, either directly or by way of guaranty or suretyship, out of any of Customer's funds or property in the custody or control of R.J. O'Brien, (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 short position for Customer: (3) cancel any or all outstanding orders. Contracts or any other commitments made on behalf of Customer.

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 ownership interest shall be solely Customer's or held jointly with others. In liquidating Customer's long or short position, R.J. O'Brien, 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 R.J. O'Brien's judgment may be necessary or advisable to protect existing positions in Customer's account, including by means of an EFP, EFS, EFO, or EFR or similar transaction.

5. CUSTOMER DEFAULT

In the event that: (i) Customer defaults on any obligations to R.J. O'Brien hereunder or otherwise in respect of any transaction or agreement; (ii) Customer fails to deposit or maintain required margin, fails to pay required premiums or fails to make any other payments required hereunder or otherwise in respect of any Contract; (iii) any representation made by Customer is not or ceases to be accurate and complete in any material respect; (iv) a case in bankruptcy is commenced or a proceeding under any insolvency or other law for the protection of creditors or for the appointment of a receiver, trustee or similar officer is filed by or against Customer, or Customer makes or proposes to make any arrangement or composition for the benefit of its creditors, or Customer or any of its property is subject to any agreement, order or judgment providing for Customer's dissolution, liquidation or reorganization, or for the appointment of a receiver, trustee or similar officer of tomer or such property; (v) any warrant or order of a attachment is issued against any Account or a judgment is levied against any Account; or (vi) R.J. O'Brien reasonably considers it necessary for its protection; then, R.J. O'Brien shall have the right, without limitation, to (A) close out any or all of Customer's open Contracts; (B) cancel any or all of Customer's outstanding orders; (C) treat any or all of Customer's obligations due R.J. O'Brien as immediately due and payable; (D) set off any obligations of R.J. O'Brien to Customer against any obligations of Customer to

Collateral or the proceeds of the sale of any Collateral to satisfy

R.J. O'Brien; (E) sell any Collateral and/or set off and apply any any obligations of Customer to R.J. O'Brien; (F) borrow or buy options, securities, Contracts or other property for any Account; and/or (G) terminate any or all of R.J. O'Brien's obligations for future performance to Customer. So long as R.J. O'Brien's rights or position would not be jeopardized thereby, R.J. O'Brien shall make a good faith effort to notify Customer of its intention to take any of the actions specified in (A) through (G) above before taking any such action, provided that R.J. O'Brien shall not be deemed to have breached any obligation to Customer if no such notice is given. Any sale or purchase hereunder may be made in any manner determined by R.J. O'Brien to be commercially reasonable. It is understood that, in all cases, a prior demand or notice shall not be considered a waiver of R.J. O'Brien's right to take any action provided for herein and that Customer shall be liable for the payment of any deficiency remaining in each Account after any such action is taken, together with interest thereon and all costs relating to liquidation and collection (including reasonable attorneys' fees).

6. SECURITY

As security for the payment or performance of all obligations to R.J. O'Brien or any of its affiliates now or hereafter existing (collectively, the "R.J. O'Brien Entities") presently outstanding or to be incurred under this or any other agreement or otherwise, Customer grants the R.J. O'Brien Entities a security interest in and right of setoff against any and all property belonging to Customer or in which Customer may have an interest, and the proceeds thereof, held by any R.J. O'Brien Entity or carried in any account of Customer with any R.J. O'Brien Entity, or which are, or may become, due to Customer or to any of the R.J. O'Brien Entities for any of Customer's accounts (including amounts from any exchange or clearing broker in respect of any Contracts) and all rights Customer may have against any of the R.J. O'Brien Entities (collectively, the "Collateral"). The Collateral shall be subject to such security interest and right of setoff to discharge all obligations of Customer to any of the R.J. O'Brien Entities, wherever or however arising and without regard to whether or not any R.J. O'Brien Entity has made loans with respect to such Collateral.

The R.J. O'Brien Entities are authorized to sell and/or purchase any and all property in any account or to liquidate open Contracts or redeem money market or cash deposit investments in any account of Customer without notice in order to satisfy such obligations. In enforcing its security interest, the R.J. O'Brien Entities shall have the discretion to determine the amount, order and manner of property to be sold and shall have all the rights and remedies available to a secured party under applicable law. Without the consent of R.J. O'Brien, Customer will not cause or allow any of the collateral held in any Customer account, whether now owned or hereafter acquired, to be or become subject to liens, security interests, mortgages or encumbrances of any nature other than the security interest in favor of the R.J. O'Brien Entities. Customer acknowledges that R.J. O'Brien and each of its affiliates act as agents for each other in respect of the Collateral subject to the security interest, lien and right of setoff described above.

7. DEBIT BALANCES, COMMISSIONS, FEES AND OTHER COSTS

Customer agrees to pay (i) the amount of any trading loss, debit balance or deficiency in any of Customer's accounts; (ii) all commissions, fees and other costs incurred in connection with contracts



executed, carried and/or cleared by R.J. O'Brien, including but not limited to, introducing broker and floor brokerage, clearing, exchange and NFA fees and (iii) all regulatory, exchange and other self-regulatory fees, fines, penalties and charges, and any taxes, incurred or imposed with respect to Contracts or other transactions in or for Customer's accounts and any other service-related fees charged to your account, including, but not limited to, wire transfer fees, statement fees and transaction fees. In the event that Customer's account is transferred to another broker, transfer commissions and/or service fees may be charged.

Any interest accrued in any account on excess cash balances shall be retained by R.J. O'Brien. R.J. O'Brien shall be under no obligation to pay or account to Customer for any interest income or benefits that may be derived from or use of client monies, reserves, deposits, cash equivalents or any other property. If Customer does not promptly pay a debit in Customer's account (s) and R.J. O'Brien deems it necessary to take collection action, Customer will hold R.J. O'Brien harmless for all losses and expenses and will reimburse R.J. O'Brien for the debit and all costs incurred, including reasonable attorneys' fees, in connection with such collection actions. Customer agrees to pay interest on debits and deficiencies at the greater of 2% per month or at an annual rate of 2% over the prime rate at the Harris Trust & Savings Bank of Chicago.

R.J. O'Brien is authorized to transfer among your regulated account and any of your other account(s), including foreign exchange account(s) and non-regulated accounts(s) and vice versa, such excess funds as may be required for any reason R.J. O'Brien deems appropriate in R.J. O'Brien's sole and absolute discretion.

8. FOREIGN EXCHANGE RISK

If Customer directs R.J. O'Brien to enter into any transaction which is effected in a foreign currency or if funds provided by Customer involve the use of a foreign currency, any profit or loss arising as a result of a fluctuation in the exchange rate affecting such currency will be entirely for Customer's account and risk. All initial and subsequent deposits for margin purposes shall be made in U.S. dollars, unless otherwise requested in writing by Customer, and written approval from R.J. O'Brien is obtained. R.J. O'Brien is authorized to convert funds in Customer's account (s) into and from the relevant foreign currency at the rate of exchange plus appropriate fees, obtained from R.J. O'Brien or R.J. O'Brien's banker.

9. EXCHANGE AND FEDERAL RULES

All transactions handled by R.J. O'Brien on Customer's behalf shall be subject to the constitution, regulations, customs and interpretations of each exchange or market (and its clearing house, if any), on which the trades are executed, and to all applicable statutes and governmental regulations. R.J. O'Brien shall not be liable to Customer as a result of any action taken by R.J. O'Brien to comply therewith. R.J. O'Brien's violation of any exchange or other self regulatory organization's regulations shall not provide Customer with either a defense to a claim by R.J. O'Brien or the basis of a claim against R.J. O'Brien. R.J. O'Brien has no obligation to ensure that Customer abides by the rules and regulations pertaining to it.

10. POSITIONS AND DELIVERIES

Customer acknowledges Customer's reporting obligations (regarding certain sized positions) under CFTC Regulations, including the obligation to complete Form 40 upon request by the CFTC. Customer acknowledges that the making or accepting of delivery pursuant to a futures contract may involve a much higher degree of risk than liquidating a position by offset. R.J. O'Brien has no control over and makes no warranty with respect to grade, quality, or tolerances of any commodity delivered in fulfillment of a contract. Customer understands that, unless the contract specifications state to the contrary, every futures contract contemplates delivery and Customer shall promptly advise R.J. O'Brien if Customer intends to make or take delivery. When Customer intends to take delivery, Customer shall deposit with R.J. O'Brien the full value of the commodity at least one (1) business day prior to the first notice day and, in the case of short positions, at least four (4) business days prior to last trading day. Alternatively, sufficient funds to take delivery or the necessary documents must be in the possession of R.J. O'Brien within the same periods described above. If R.J. O'Brien does not receive the aforementioned instructions, funds or documents, R.J. O'Brien is authorized, at its discretion, to borrow or buy any property necessary to honor such obligation, and customer shall pay and indemnify R.J. O'Brien for any costs, losses, penalties or damages (including, but not limited to delivery and storage costs) which R.J. O'Brien may incur in fulfilling this responsibility.

Customer agrees that R.J. O'Brien, at its discretion, may establish trading limits for Customer's account and may limit the number of open positions (net or gross) which Customer may execute, clear, and/or carry with or acquire through it.Customer agrees (i) not to make any trade which would have the effect of exceeding such limits, (ii) that R.J. O'Brien may require Customer to reduce open positions carried with R.J. O'Brien, and (iii) that R.J. O'Brien may refuse to accept orders to establish new positions. R.J. O'Brien may impose and enforce such limits, reduction, or refusal whether or not they are required by applicable law, regulations, or rules. Customer shall comply with all position limits established by any regulatory or self-regulatory organization or any exchange. In addition, Customer agrees to notify R.J. O'Brien promptly if Customer is required to file position reports with any regulatory or self-regulatory organization or with any exchange and agrees to provide R.J. O'Brien with copies of any such report. R.J. O'Brien expressly disclaims any liability for Customer's losses related to Customer's exceeding applicable limits.

Customer understands that if Customer does not liquidate a position prior to the end of trading on the last day before expiration of a security futures contract ("SSF"), Customer will be obligated to either make or accept a cash payment for cash settled contracts, or make or accept delivery of the underlying securities in exchange for final payment of the settlement price for SSF contracts settled by physical delivery. Unless the SSF contract specifications state to the contrary, every SSF contract contemplates delivery. Before a Customer will be allowed to make or take delivery of an SSF, Customer must provide R.J. O'Brien with information relating to the broker-dealer through which Customer will effect delivery. In this regard Customer will identify the name of the broker-dealer, the broker-dealer's Depository Trust Number, the broker Dealer's Institutional ID number, and the Customer's account number on the books of the broker-dealer.



When a customer intends to take delivery, Customer shall provide notification and deposit with R.J. O'Brien the full value of the underlying securities subject to the SSF at least five (5) business days prior to the last trading day of the contract. When the customer holds a short position and intends to make delivery, Customer shall provide notification and tender the underlying securities subject to the SSF to R.J. O'Brien at least five (5) business days prior to the last trading day. If R.J. O'Brien does not receive the aforementioned instructions, funds or stocks, R.J. O'Brien is authorized, at its discretion, to borrow or buy any stock necessary to honor such obligation, or to liquidate or otherwise offset the position, and Customer shall pay and indemnify R.J. O'Brien for any costs, losses, penalties or damages (including, but not limited to settlement and transaction costs) which R.J. O'Brien might incur in fulfilling this responsibility.

Approval for hedge margins does not exempt an account from speculative positions limits. To be exempt from speculative position limits requires application and approval of a hedge exemption from the CFTC and the contract's respective exchange.

11. OPTIONS

CUSTOMER WILL NOT PURCHASE A PUT OR CALL UNLESS CUSTOMER IS ABLE TO SUSTAIN THE TOTAL LOSS OF THE PREMIUM AND RELATED TRANSACTION COSTS. CUSTOMER WILL NOT SELL (WRITE) A CALL OR PUT OPTION UNLESS CUSTOMER EITHER HAS AN OFFSETTING POSITION IN THE UNDERLYING FUTURES CONTRACT OR IS ABLE TO WITHSTAND SUBSTANTIAL FINANCIAL LOSSES.

Customer recognizes that Customer is fully responsible for taking action to exercise an option contract. R.J. O'Brien shall not be required to take any action with respect to an option contract, including any action to exercise a valuable option prior to its expiration date, except upon express instructions from Customer. In this connection, Customer understands that exchanges have established exercise cut-off times for the tender of exercise instructions, and that Customer's options may become worthless in the event that Customer does not provide instructions promptly. Customer also understands that some exchanges may automatically exercise long in the money options pursuant to the regulations of such exchange. Customer further understands that R.J. O'Brien cut-off times may differ from the times established by the exchanges, and hereby agrees to waive any and all claims for damage or loss which might arise out of an option not being exercised. R.J. O'Brien will not be responsible for information regarding option expiration dates and assignment notification. Additionally, R.J. O'Brien will not be responsible for any errors or omissions regarding such information. Customer understands that short option positions are subject to assignment at any time, including positions established on the same day that exercises are assigned. Notices of assignment are allocated on a random basis among all customers' short option positions which are subject to exercise

12. LIMITATION OF LIABILITY OF R.J. O'BRIEN

Customer authorizes R.J. O'Brien to purchase and sell Contracts, in accordance with Customer's oral or written instructions. In executing transactions on an exchange, R.J. O'Brien will not be responsible to Customer for negligence or misconduct of an independent floor broker selected by R.J. O'Brien R.J. O'Brien will not be responsible to Customer in the event of error, failure, negligence, or misconduct on the part of any non-guaranteed Introducing Broker, Commodity Trading Advisor, or other person acting

on Customer's behalf and, without limiting the foregoing, R.J. O'Brien has no obligation to investigate the facts surrounding any transaction in Customer's Account (s) which is introduced by such non-guaranteed Introducing Broker, Commodity Trading Advisor, or other person. With respect to guaranteed Introducing Brokers, Customer agrees that R.J. O'Brien's maximum liability to Customer shall be limited to the amount of the minimum net capital requirement (calculated in accordance with 17 C.F.R. §1.17 as of the date of the finding of actual liability), that would have been required for the guaranteed Introducing Broker had it been a non-guaranteed Introducing Broker. Customer expressly acknowledges that a finding of liability against an Introducing Broker may substantially exceed the amount of the Introducing Broker's minimum net capital requirement which, in some circumstances may be as low as \$45,000. This means that Customer's right to recover from R.J. O'Brien, with respect to any Guaranteed Introducing Broker, pursuant to the provisions of this paragraph could also be limited to \$45,000.

Customer shall have no claim against R.J. O'Brien for any loss, damage, liability, cost, charge, expense, penalty, fine, or tax caused directly or indirectly by (a) governmental, court, exchange, regulatory or self-regulatory organization restrictions, regulations, rules, decisions, or orders, (b) suspension or termination of trading, (c) war or civil or labor disturbance, (d) delay or inaccuracy in the transmission or reporting of orders due to a breakdown or failure of computer services, transmission, communication or execution facilities, (e) the failure or delay by any exchange or clearinghouse to enforce its rules or to pay to R.J. O'Brien any margin due in respect of Customer's account, (f) the failure or delay by any bank, trust company, clearing organization, or other person which, pursuant to applicable exchange rules, is holding Customer funds, securities, or other property to pay or deliver the same to R.J. O'Brien, (g) any other cause or causes beyond R.J. O'Brien's control; (h) as a result of any action taken by R.J. O'Brien or its agents to comply with applicable law (including for this purpose the rules of exchanges, clearinghouses and other self-regulatory organizations); (i) as a result of any actions taken by R.J. O'Brien in connection with the exercise of the available remedies pursuant to Section 4; or (j) for acts or omissions of those neither employed nor supervised by R.J. O'Brien. R.J. O'Brien shall not be responsible for any loss, liability, damage or expense except to the extent that such loss, liability, damage or expense arises from its gross negligence or willful misconduct. In no event will R.J. O'Brien or any of its service providers be liable to Customer for consequential, incidental or special damages, even if advised of the possibility of such damages.

13. COMMUNICATIONS AND ORDERS

Since contracts may experience rapid movements in price, Customer's attention is required in the placement of orders and execution of the same by R.J. O'Brien. Unless a managed (discretionary) account has been arranged through the execution of a written trading authorization, each order should be communicated to R.J. O'Brien by the Customer or Customer's duly authorized broker. Instructions should include, but may not necessarily be limited to, the commodity involved, quantity, price, and delivery month. Any trade not specifically authorized by Customer must be immediately reported by Customer directly to R.J. O'Brien's Compliance Department. Customer will be financially responsible for all trades not so reported and for any losses arising by virtue of a course of dealing involving his grant of de facto control over the account to broker.



R.J. O'Brien makes 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 Customer by its employees or agents.

Orders are good for one day only (regular day trading session) unless specified and accepted as being "open", in which case the order will remain open until filled or the Customer specifies otherwise. In some circumstances, R.J. O'Brien may be on the other side of Customer's trade. The price at which an order is actually executed shall be binding, even if incorrectly reported. Similarly, an order actually executed but in error reported as not executed is also binding.

Customer agrees that when R.J. O'Brien executes sell or buy orders on Customer's behalf, R.J. O'Brien, its directors, officers, employees, agents, affiliates, and any floor broker or terminal operator may take the other side of Customer's order for the account of such person subject to such order being executed in accordance with and subject to the limitations and conditions, if any, contained in applicable rules and regulations.

R.J. O'Brien offers certain Internet-based, electronic order entry platforms for the purpose of facilitating the entry of customer orders trading in Contracts ("RJO Platform (s)"). Customer understands that while the Internet and the World Wide Web generally are dependable, technical problems or other conditions may delay or prevent Customer from entering or canceling an order on an RJO Platform, or likewise may delay or prevent R.J. O'Brien from executing an order on an RJO Platform. R.J. O'Brien shall not be liable for, any technical problems, system failures and malfunctions, communication line failures, equipment or software failures or malfunctions, system access issues, system capacity issues, high Internet traffic demand, security breaches and unauthorized access beyond the reasonable control of R.J. O'Brien, or other similar computer problems and defects relating to an RJO Platform. R.J. O'Brien does not represent, warrant or guarantee that Customer will be able to access or use an RJO Platform at times or locations of Customer's choosing, or that R.J. O'Brien will have adequate capacity for an RJO Platform as a whole or in part by R.J. O'Brien's or Customer's use of or reliance on an RJO Platform or its content or in otherwise performing its obligations under or in connection with this Agreement. R.J. O'Brien reserves the right to suspend service and deny access to any RJO Platform without prior notice during scheduled or unscheduled system maintenance or upgrading.

In the event that Customer is unable to transmit an order through an RJO Platform, or is unable to confirm that an electronic order has been received by R.J. O'Brien, Customer should follow these procedures: (i) if Customer's account is introduced to R.J. O'Brien by an Introducing Broker, Customer must contact the Introducing Broker, notify the Introducing Broker of the exact nature of the problem and, if appropriate, place the order by phone through the Introducing Broker; (ii) if Customer is unable to contact his Introducing Broker by telephone, or, if Customer's account is not an introduced account, Customer must contact R.J. O'Brien at (312) 373-5000 and notify R.J. O'Brien of the exact nature of the problem including, but not limited to, the details of the order (including the contract, quantity and whether the order was to buy or sell). Customer agrees that any order placed through this number shall be for liquidation of existing positions only. This number is not to be called by customer for customer support. Customer agrees that

when following these procedures, Customer shall be liable for any losses arising out of any order that has previously been transmitted by electronic means, as well as the order placed orally through R.J. O'Brien or Customer's Introducing Broker.

14. REPORTS AND NOTICES

SHOULD INACCURACIES OR DISCREPANCIES APPEAR ON CUSTOMER'S STATEMENTS OF ACCOUNT(S), MARGIN CALLS, OR NOTICES CUSTOMER AGREES THAT IT IS CUS-TOMER'S DUTY TO INFORM R.J. O'BRIEN OF THE PROB-LEM BY TELEPHONE OR FACSIMILE IMMEDIATELY UPON THE EARLIER OF ACTUAL RECEIPT OF THE STATEMENT BY CUSTOMER, OR THE TIME THE STATEMENT IS DEEMED RECEIVED BY CUSTOMER PURSUANT TO THIS PARAGRAPH 14. IN THE EVENT THAT CUSTOMER DOES NOT RESPOND IMMEDIATELY, EXECUTED ORDERS AND STATEMENT REPORTS SHALL BE CONSIDERED RATIFIED BY CUSTOMER AND SHALL RELIEVE R.J. O'BRIEN OF ANY RESPONSIBILITY WHATSOEVER RELATIVE TO THE TRANSACTION(S) IN QUESTION. ALL REPORTS OF INAC-CURACIES OR DISCREPANCIES MUST BE MADE TO CUS-TOMER'S BROKER AND TO R.J. O'BRIEN'S COMPLIANCE DEPARTMENT.

Customer has the responsibility to maintain contact with Customer's individual broker at all times that Customer has market positions or has placed orders but is not available at Customer's regular address or telephone number to receive reports.

Customer authorizes R.J. O'Brien to transmit electronically (which may include electronic mail) to Customer or post on an RJO Platform all statements, compilations and details of transactions, and other notices, and Customer hereby consents to such methods of receiving such information. There will not be any additional cost or fee for this service. If Customer requests a hard copy of any of these documents, other than by downloading or printing such information or documents from an RJO Platform, there will be a charge as established by R.J. O'Brien from time to time. This consent to receiving such information electronically shall be effective until revoked by Customer in writing and delivered to R.J. O'Brien. It shall be Customer's responsibility to check Customer's electronic mail and an RJO Platform site on a regular basis, and no less than daily, to receive statements, compilations and details of transactions, and other notices from R.J. O'Brien. Customer agrees to download or print such statements, compilations and details of transactions, and other notices if such statements or information are available for downloading or printing. Information sent by electronic mail shall be deemed received by Customer by 10:00 a.m. (Central Time) the next business day after R.J. O'Brien sends the electronic mail. Information and notices posted on an RJO Platform shall be deemed received by Customer by 10:00 a.m. (Central Time) after R.J. O'Brien posts such information and notices. Customer shall promptly notify R.J. O'Brien of any difficulty in accessing, opening or otherwise viewing an electronically transmitted document or information.

Upon Customer's request, R.J. O'Brien will use an alternative method of delivering such document or information to Customer, at Customer's sole expense. Such alternative means of delivery shall not affect the date such document or information is deemed received by Customer, as set forth above. Details of trades and any other similar information or notices either sent to Customer or posted on an RJO Platform shall be conclusive and binding unless Customer notifies R.J. O'Brien to the contrary.

Rev 8/12R 10



(i) where a report or notice is sent electronically, posted on an RJO Platform or made orally, then, as the case may be, at the earlier of the time actually received, or deemed to be received pursuant to this paragraph 14 by Customer, or (ii) where a report or notice is in writing by 8:00 a.m. (Central Time) on the next Business Day following receipt of such report.

15. CUSTOMER REPRESENTATIONS, WARRANTIES, AND AGREEMENTS

Customer represents and warrants to and agrees with R.J. O'Brien that:

- A) Customer, if an individual, represents that he or she is of legal age and competence to enter into this Agreement and that transactions in Contracts as contemplated by this Agreement are appropriate for Customer and consistent with Customer's investment objectives;
- B) Customer, if a legal entity, represents that it is duly organized, validly existing, and empowered to enter into this Agreement, to establish the Account, to enter into transactions in Contracts as contemplated hereby and that such transactions are suitable for Customer and do not violate any of Customer's constituent documents. Customer further represents that the person executing this Agreement on its behalf has been duly and validly authorized to do so;
- C) Neither Customer nor any partner, director, officer, member, manager, or employee of Customer nor any affiliate of Customer is a partner, director, officer, member, manager, or employee of a futures commission merchant, broker-dealer, introducing broker, or regulatory of self-regulatory organization except as previously disclosed in writing to R.J. O'Brien;
- D) except as disclosed on the accompanying General Account Application or otherwise provided in writing, (i) Customer is not a commodity pool operator or is exempt from registration under CFTC rules, and (ii) Customer is acting solely as principal and no one other than Customer has any interest in any Account of Customer. Customer agrees to notify R.J. O'Brien of the identity of any other person or entity that controls the trading of the Account, has a financial interest of 10% or more in the Account or the identity of any other account in which the Customer controls or has a 10% or greater ownership interest;
- E) If Customer's account has been designated as a "hedge account", and unless Customer notifies R.J. O'Brien to the contrary at the time it places an order with R.J. O'Brien, Customer represents that each such order will be a bona fide hedging transaction as defined in CFTC Regulation 1.3(z);
- F) Customer represents that it will maintain its Account in accordance with and shall be solely responsible for compliance with laws and with rules, regulations, and/or guidelines issued by federal, state, or administrative bodies having oversight or regulatory authority over its activities;
- G) Customer has determined that trading in commodity interests is appropriate for Customer, is prudent in all respects and does not and will not violate Customer's charter or by-laws (or other comparable governing document) or any law, rule, regulation, judgment, decree, order, or agreement to which Customer or its property is subject or bound;
- H) As required by CFTC regulations, Customer shall create, retain, and produce upon request of the applicable contract market, the CFTC or the United States Department of Justice documents (such as contracts, confirmations, telex printouts, invoices, and documents of title) with respect to cash transac-

- tions underlying exchanges of futures for cash commodities or exchanges of futures in connection with cash commodity transactions;
- I) Absent a separate written agreement between Customer and R.J. O'Brien with respect to give-ups, R.J. O'Brien, in its discretion, may, but shall have no obligation to, accept from other brokers contracts executed by such brokers on an exchange for Customer and proposed to be "given up" to R.J. O'Brien for clearance and/or carrying in the Account; if R.J. O'Brien does accept such Contracts, Customer authorizes R.J. O'Brien to pay and charge to Customer's Account any give-up or give-in fee that may be charged by any exchange or clearing house or by executing firm or broker whom Customer or its agents have authorized to execute transactions for Customer's Account;
- J) If Customer is subject to the Financial Institution Reform, Recovery and Enforcement Act of 1989, the certified resolutions set forth following this Agreement have been caused to be reflected in the minutes of Customer's Board of Directors (or other comparable governing body) and this Agreement is and shall be, continuously from the date hereof, an official record of Customer; and
- K) The accompanying General Account Application (including any financial statements furnished in connection therewith) is true, correct, and complete.

Customer agrees to promptly notify R.J. O'Brien in writing if any of the warranties and representations contained in this Section 15 becomes inaccurate or in any way ceases to be true, complete, and correct

16. TAPE RECORDING

Customer hereby authorizes R.J. O'Brien to make recordings of telephone conversations between Customer and R.J. O'Brien regardless of whether a periodic tone signal is used. Customer consents to the use of such tape recording in any forum in connection with resolving disputes. R.J. O'Brien and its affiliates may also, at their discretion, utilize a telephone recording system to place Customers orders. R.J. O'Brien may erase or dispose of such tapes in accordance with its normal procedures.

17. AMENDMENTS AND GUARANTEES

This Agreement, reflects the entire agreement between R.J. O'Brien and Customer and supersedes all prior oral and written agreements between the parties relating to the subject matter hereof. No provision hereof shall in any respect be waived, augmented or modified unless in writing and signed by an official so authorized in R.J. O'Brien's office headquarters.

18. GOVERNING LAW AND WAIVER OF STATUTES OF LIMITATIONS

This Agreement shall be governed by the internal laws of the State of Illinois, excluding conflict-of-laws principles. Customer agrees that no law suit, arbitration proceeding or other claim or action relating to this Agreement or the transactions in Customer's account may be initiated by Customer unless commenced within one year from the date of the disputed transaction; provided, however, that any action brought under the provisions of Section 14 of the Commodity Exchange Act, may be brought at any time within two years after the cause of action accrues.

Continued on Next Page.

Rev 8/12R 11 ESTABLISHED IN 1914



19. INDEMNIFICATION

Customer agrees to indemnify, defend and hold harmless R.J. O'Brien and its directors, officers, employees, and agents from and against any loss, cost, claim, damage (including any consequential cost, loss or damage), liability, or expense (including reasonable attorneys' fees) and any fine, sanction or penalty made or imposed by any regulatory or self-regulatory authority or any exchange as the result, directly or indirectly, of: (a) Customer's failure, breach, or refusal to fully and timely comply with any provision of this Agreement or perform any obligation on its part to be performed pursuant to this Agreement; (b) any actions of any third party selected by Customer which affect Customer's Account; or (c) Customer's failure to timely deliver any security, commodity, or other property previously sold by R.J. O'Brien on Customer's behalf. Customer additionally agrees to pay promptly to R.J. O'Brien all reasonable attorney's fees incurred by R.J. O'Brien (i) in the enforcement of any of the provisions of this Agreement, or (ii) in any action, claim or demand filed by Customer arising out of this Agreement or any other Agreements between R.J. O'Brien and Customer where R.J. O'Brien is not found to be liable or responsible.

20. ELECTRONIC TRADING AND ONLINE SERVICES

R.J. O'Brien will provide Customer with an individual password and a unique user identification (together, the "Access Codes"). The Access Codes will enable Customer to access its account and enter orders for its account through an RJO Platform. Customer is responsible for maintaining adequate security measures to ensure that the Access Codes are kept confidential at all times. Customer accepts full responsibility for the use and protection of the Access Codes, which includes, but is not limited to, all orders entered into an RJO Platform using the Access Codes and changes in Customer's account information that are entered using the Access Codes.

Customer shall take reasonable and appropriate steps to reduce or limit trading errors resulting from the Customers' access to an RJO Platform. Such measures may include placing limits on the number of contracts placed per order or placing limits on the price at which an order may be placed.

Customer accepts full responsibility for monitoring its account (s) with R.J. O'Brien. Should Customer become aware of any loss, theft or unauthorized use of its Access Codes, Customer shall notify R.J. O'Brien immediately. Customer shall notify R.J. O'Brien within one (1) business day of discovering any failure to receive compilations and details of transactions or other communications from R.J. O'Brien. Under either situation, Customer shall provide written notice to R.J. O'Brien's Compliance Director at R.J. O'Brien's office, and such notice will be deemed received only if actually delivered, sent by electronic mail to info@rjobrien.com, Attention: Compliance Department, or by fax to 312-373-5290, Attention: Compliance Department.

Any and all materials that R.J. O'Brien provides to Customer in connection with an RJO Platform are (i) provided on a non-exclusive non-transferable basis, (ii) the property of R.J. O'Brien and (iii) intended for Customer's use only. Customer shall not resell or permit access to an RJO Platform to others and agrees not to copy any materials appearing on an RJO Platform for resale to others. Customer further agrees not to delete any copyright notices or other indications of protected intellectual property rights from materials that Customer prints or downloads from an RJO Platform. Customer shall not obtain any intellectual property rights in

or any right or license to use such materials on an RJO Platform other than as set out herein. Customer agrees to use an RJO Platform at Customer's own risk. Customer shall be responsible for providing and maintaining the means by which to access an RJO Platform, which may include without limitation a personal computer, modem and telephone or other access line. Customer shall be responsible for all access and service fees necessary to connect to an RJO Platform and assumes all charges incurred in accessing such system. Customer further assumes all risks associated with the use and storage of information on Customer's personal computer. An RJO Platform may contain links to websites controlled or offered by third parties. The existence of such links should not be construed as an endorsement, approval or verification by R.J. O'Brien of any content available on third party sites.

21. TERMINATION

This Agreement may be terminated by R.J. O'Brien or the Customer immediately upon written notice to the other party. In the event of such termination, Customer shall immediately liquidate positions in Customer's account (s), or transfer such open commodity interest positions to another FCM. Notwithstanding any termination, Customer shall satisfy all liabilities to R.J. O'Brien arising hereunder (including, but not limited to, payment of applicable debit balances, commissions and fees, including fees with respect to the transfer of positions to another FCM). This Agreement shall be binding upon Customer's personal representatives and legal successors, and shall inure to the benefit of R.J. O'Brien's successors by merger, assignment, consolidation or otherwise. In the event of Customer's bankruptcy proceedings, death, incompetence, dissolution, or failure to provide adequate margin, R.J. O'Brien is authorized to terminate account in the fashion described elsewhere in this Agreement, without prior notice to the Customer. The termination of this Agreement shall not affect the obligations of the parties arising from transactions entered into prior to such termination. R.J. O'Brien reserves the right to terminate any Customer account at any time, for any reason. connect to an RJO Platform and assumes all charges incurred in accessing such system. Customer further assumes all risks associated with the use and storage of information on Customer's personal computer. An RJO Platform may contain links to websites controlled or offered by third parties. The existence of such links should not be construed as an endorsement, approval or verification by R.J. O'Brien of any content available on third party sites.

22. OFFSETTING POSITIONS

If Customer maintains separate accounts in which, pursuant to Commodity Futures Trading Commission Regulation 1.46, offsetting positions are not closed out, R.J. O'Brien hereby advises Customer that (if held open) offsetting long and short hedge positions in the separate accounts may result in the charging of additional fees and commissions and the payment of additional margin, although offsetting positions will result in no additional market gain or loss.

23. CFTC Reg. 15.05 -DESIGNATION OF R.J. O'BRIEN AS AGENT OF FOREIGN BROKERS, CUSTOMERS OF A FOREIGN BROKER ANDFOREIGN TRADERS; AND REG 21.03 SELECTED SPECIAL CALLS – DUTIES OF FOREIGN BROKERS, DOMESTIC AND FOREIGN TRADERS, FUTURES COMMISSION MERCHANTS (FCM) AND CONTRACT MARKETS



If Customer is a foreign broker it understands that pursuant to CFTC Regulation 15.05, R.J. O'Brien is Customer's agent (and in the case of a foreign broker, the agent of its customers) for purposes of accepting delivery, and service of any communication upon R.J. O'Brien shall constitute valid and effective service or delivery upon Customer (and if it is a foreign broker, upon its customers). Customer understands that said regulation requires R.J. O'Brien to transmit the communication promptly to it (or its customer) in a manner which is reasonable under the circumstances or specified by the CFTC. Customer also understands CFTC Regulation 21.03 requires it to provide to the CFTC upon special call, market information concerning its options and futures trading (or its customers') as outlined in the regulation. If Customer fails to respond to the special call, the CFTC may direct the appropriate contract market and all brokers to prohibit further trades for or on its behalf (or for its customers) in the contract specified in the call unless such trades offset existing open contracts. Special calls are made where the information requested would assist the CFTC in determining whether a threat of market manipulation, corner, squeeze or other market disorder existed. Under Regulation 21.03(g) if Customer believes it is aggrieved by the action taken by the CFTC it shall have the opportunity for a prompt hearing after the CFTC acts. (Customer understands that copies of CFTC Regulation 15.05 and 21.03 are available from R.J. O'Brien).

24. MARKET INFORMATION

Exchange and R.J. O'Brien brochures and research are often provided as trading tools. In addition, an RJO Platform may also contain certain market information. Customer acknowledges that: (a) any information R.J. O'Brien's research department may communicate to Customer does not constitute an offer to sell or a solicitation of any offer to buy any Contract; (b) such recommendations and information, although based upon information obtained from sources believed by R.J. O'Brien to be reliable, are incidental to R.J. O'Brien's business as a futures commission merchant, may be incomplete and not subject to verification, and will not serve as the primary basis for any decision by Customer; (c) R.J. O'Brien makes no representation, warranty, or guarantee as to, and shall not be responsible for, the accuracy or completeness of any information or trading recommendation furnished to Customer; (d) recommendations to Customer as to any particular transaction at any given time may differ among R.J. O'Brien's personnel due to diversity in analysis of fundamental and technical factors and may vary from any standard recommendation made by R.J. O'Brien in its market letters or otherwise; and (e) R.J. O'Brien has no obligation or responsibility to update any market recommendations or information it communicates to Customer. Customer understands that R.J. O'Brien and its officers, directors, affiliates, stockholders, representatives, or associated persons may have positions in and may intend to buy or sell Contracts which are the subject of market recommendations furnished to Customer, and that the market positions of R.J. O'Brien or any such officer, director, affiliate, stockholder, representative, or associated person may or may not be consistent with the recommendations furnished to Customer by R.J. O'Brien.

25. CONSENT TO JURISDICTION

Customer agrees that all disputes, claims, actions or proceedings arising directly, indirectly, or otherwise in connection with, out of, related to or from this Agreement shall be litigated or arbitrated exclusively in a court or arbitration forum located in Chicago, Illinois, unless otherwise agreed by R.J. O'Brien. Customer

consents and submits to the jurisdiction of any state or federal court or arbitration forum located within the Northern District of Illinois. Customer hereby waives any right Customer may have to transfer or change the venue of any litigation brought against Customer by R.J. O'Brien or by Customer against R.J. O'Brien. Customer acknowledges and consents to R.J. O'Brien's election to instigate legal action to collect any debit balance in Customer's account(s) in any court located in the Northern District of Illinois.

Customer appoints and designates R.J. O'Brien (or any other party whom R.J. O'Brien may from time to time hereinafter designate) as Customer's true and lawful attorney-in-fact and duly authorized agent for service of legal process and agrees that service of such process upon such attorney-in-fact shall constitute personal service of such process upon Customer; provided, that R.J. O'Brien or such other party shall, within five days after receipt of any such process, forward the same by air courier or by certified mail, together with all papers affixed thereto, to Customer at Customer's mailing address. If any provision of this paragraph shall be prohibited by or invalid under applicable law, such provision shall be ineffective only to the extent of such prohibition or invalidity, without invalidating the remaining provisions of this paragraph.

26. WAIVER, AMENDMENT AND ASSIGNMENT

The failure of R.J. O'Brien to enforce at any time any provision of this Agreement shall not be construed to be a waiver of such provision nor in any way to affect the validity of this Agreement or the right of R.J. O'Brien thereafter to enforce each and every provision hereof. No waiver of any breach of this Agreement shall be held to constitute a waiver of any other or subsequent breach. No waiver or amendment shall be implied from any conduct, action, or inaction. No provision of this Agreement may be waived or amended by customer unless such waiver or amendment is in writing and signed by an authorized officer of R.J. O'Brien. RJO may assign, transfer, sell or otherwise convey its rights and obligations hereunder to another futures commission merchant upon notice to you.

27. FACSIMILE EXECUTION

Customer agrees any records stored by a printed media storage method shall be deemed complete, true and genuine record of your account documents and signatures. If the Customer elects to open an account through the use of an electronic signature under the federal E-SIGN legislation, such electronic signature will meet the requirements of an original signature. However, at the sole discretion of R.J. O'Brien, documents signed and transmitted by facsimile machine or electronic mail may be accepted as original documents. The signature of any person or entity thereon, is to be considered as an original signature, and the document transmitted is to be considered to have the same binding effect as an original signature on an original document. At the request of R.J. O'Brien, any facsimile or telecopy document must be re-executed in original form by the persons or entities who executed the facsimile or telecopy document. No party hereto may raise the use of a facsimile or telecopier machine as a defense to the enforcement of this Agreement or any amendment or other document executed in compliance with this section. Customer attests that if Customer has downloaded this Agreement from the internet or any electronic message, Customer has printed it directly from the PDF or other electronic file provided by R.J. O'Brien without modification.

28. ELECTRONIC SIGNATURE

Customers consent and agree that their use of a key pad, mouse or



other device to select an item, button, icon or similar act/action while using any electronic service R.J. O'Brien offers, or in accessing or making any transactions regarding any agreement, acknowledgment, consent, terms, disclosures or conditions constitutes such Customer's signature, acceptance and agreement as if actually signed by such Customer in writing. Further, Customers agrees that no certification authority or other third party verification is necessary to the enforceability of their signature or any resulting contract between them and R.J. O'Brien.

29. SEVERABILITY

If any provision of this Agreement shall be prohibited by or invalid under applicable law, such provision shall be ineffective only to the extent of such prohibition or invalidity ascend, without invalidating the remaining provisions of this Agreement.

THIS ACCOUNT AGREEMENT CONTAINS A CONTRACTUAL AGREEMENT. DO NOT SIGN UNTIL YOU HAVE READ IT CAREFULLY. BY SIGNING BELOW, THE UNDERSIGNED REPRESENTS AND WARRANTS TO R.J. O'BRIEN THAT ALL INFORMATION CONTAINED HEREIN, OR IN ANY OTHER ACCOUNT FORM OR OTHER DOCUMENT FROM THE UNDERSIGNED IS TRUE AND CORRECT AND THAT IF ANY CHANGES TO SUCH INFORMATION OCCUR, THE UNDERSIGNED WILL IMMEDIATELY INFORM R.J. O'BRIEN, IN WRITING, OF SUCH CHANGES. BY SIGNING BELOW, THE UNDERSIGNED ACKNOWLEDGES THAT (S)HE HAS READ AND UNDERSTANDS ALL OF THE TERMS AND CONDITIONS OF THE COMMODITY CUSTOMER AGREEMENT AND SHALL BE BOUND BY THEM.

REST OF PAGE INTENTIONALLY LEFT BLANK



ACCOUNT AGREEMENT

A. Individual Account	
Customer agrees to be bound by the terms of the agrees or sole Proprietorship account and no one else has a	Account Agreement. Customer represents that this is an Individual an interest in this account.
X	
Signature	Date
	_
Print Name	
B. Joint Account	
Each of us agree that we are bound by the terms of respect to said account shall be joint and several.	of the Account Agreement and that the liability of each of us with
instructions with respect to buying or selling with confirmations, reports, statements and other commute the opening or maintenance of the account; and (4) and completely as if the other joint tenant had no inquire into the purpose or propriety of any instruction.	ructions with respect to the account, including but not limited to ithdrawals of excess funds; (2) to receive any demands, notices nunications of any kind; (3) to sign any other documents related to generally to deal with R.J. O'Brien in connection herewith as fully nterest herein. R.J. O'Brien shall be under no duty or obligation to tion given and shall be under no obligation to see to the application hall be made to R.J. O'Brien except in the name of the account.
X	
Signature	Date
Print Name	
X	
Signature	Date
Print Name	



VOLUNTARY ARBITRATION AGREEMENT

This Voluntary Arbitration Agreement will be deemed a part of and incorporated into the Account Agreement with R.J. O'Brien & Associates, LLC("R.J. O'Brien") when signed below whereby the undersigned consents to and agrees to abide by the provisions hereof. If you sign this Voluntary Arbitration Agreement you agree that any controversy, claim or grievance between you and R.J. O'Brien relating to your account(s) shall, except as provided below, be resolved by arbitration before a forum chosen in accordance with the procedures described herein. Any award rendered thereon by the arbitrators shall be final and binding on each and all of the parties thereto and their personal representatives and judgment may be entered in any court having jurisdiction.

Notification of your intent to arbitrate must be sent by certified mail to R.J. O'Brien at its Chicago office. At such time as you notify R.J. O'Brien that you intend to submit a claim to arbitration, or at such time as R.J. O'Brien notifies you of its intention to submit a claim for arbitration, you will have the opportunity to elect a qualified forum for the conducting of the proceeding. Please note that, in the Account Agreement, you have agreed that the venue for all arbitration proceedings shall be within the City of Chicago, State of Illinois. Within ten business days after receipt of a notice from you or at the time R.J. O'Brien so notifies you, R.J. O'Brien will provide you with a list of three organizations whose procedures qualify them to conduct arbitrations in accordance with CFTC Rule 166.5, together with a copy of the rules of each forum listed. If you fail to make such selection within forty-five days, then R.J. O'Brien shall have the right to make such election. If R.J. O'Brien notifies you of its intent to submit a claim for arbitration, it shall designate a qualified forum for conducting the proceedings.

R.J. O'Brien will pay any incremental fees which may be assessed by a qualified forum for provision of a mixed panel, unless the arbitrators in a particular proceeding determine that you have acted in bad faith in initiating or conducting that proceeding. If, by reason of any applicable statute, regulation, exchange rule or otherwise (other than by reason of your entitlement to commence reparation proceedings under Section 14 of the Commodity Exchange Act and Part 12 of the regulations promulgated thereunder), your advance agreement to submit a controversy to arbitration would not be enforceable by R.J. O'Brien, then this provision shall not permit you to enforce R.J. O'Brien's advance agreement to submit to arbitration.

THREE FORUMS EXIST FOR THE RESOLUTION OF COMMODITY DISPUTES: CIVIL COURT LITIGATION, REPARATIONS AT THE COMMODITY FUTURES TRADING COMMISSION (CFTC) AND ARBITRATION CONDUCTED BY A SELF-REGULATORY OR OTHER PRIVATE ORGANIZATION. THE CFTC RECOGNIZES THAT THE OPPORTUNITY TO SETTLE DISPUTES BY

ARBITRATION MAY IN SOME CASES PROVIDE MANY BENEFITS TO CUSTOMERS, INCLUDING THE ABILITY TO OBTAIN AN EXPEDITIOUS AND FINAL RESOLUTION OF DISPUTES WITHOUT INCURRING SUBSTANTIAL COSTS. THE CFTC REQUIRES, HOWEVER, THAT EACH CUSTOMER INDIVIDUALLY EXAMINE THE RELATIVE MERITS OF ARBITRATION AND THAT YOUR CONSENT TO THIS ARBITRATION AGREEMENT BE VOLUNTARY.

BY SIGNING THIS AGREEMENT, YOU: (1) MAY BE WAIVING YOUR RIGHT TO SUE IN A COURT OF LAW; AND (2) ARE AGREEING TO BE BOUND BY ARBITRATION OF ANY CLAIMS OR COUNTERCLAIMS WHICH YOU OR R.J. O'BRIEN MAY SUBMIT TO ARBI-TRATION UNDER THIS AGREEMENT. YOU ARE NOT, HOWEVER, WAIVING YOUR RIGHT TO ELECT IN-STEAD TO PETITION THE CFTC TO INSTITUTE REPA-RATIONS PROCEEDINGS UNDER SECTION 14 OF THE COMMODITY EXCHANGE ACT WITH RESPECT TO ANY DISPUTE THAT MAY BE ARBITRATED PURSU-ANT TO THIS AGREEMENT. IN THE EVENT A DISPUTE ARISES, YOU WILL BE NOTIFIED IF R.J. O'BRIEN INTENDS TO SUBMIT THE DISPUTE TO ARBITRATION. IF YOU BELIEVE A VIOLATION OF THE COMMODITY EXCHANGE ACT IS INVOLVED AND IF YOU PREFER TO REQUEST A SECTION 14 "REPARATIONS" PROCEEDING BEFORE THE CF'T'C, YOU WILL HAVE 45 DAYS FROM THE DATE OF SUCH NOTICE IN WHICH TO MAKE THAT ELECTION.

YOU NEED NOT SIGN THIS AGREEMENT TO OPEN OR MAINTAIN AN ACCOUNT WITH R. J. O'BRIEN. (SEE 17 CFR 166.5.)

You are advised that if you seek reparations under Section 14 of the Commodity Exchange Act and Part 12 of the regulations promulgated thereunder, and the CFTC declines to institute reparation proceedings, claims or grievances may be subject to this Arbitration Agreement.

The undersigned hereby agrees on its behalf and on behalf of its successors and guarantors to the terms of this Arbitration Agreement.			
Entity Name			
XAuthorized Signature / Title			
Date			



REQUEST FOR ELECTRONIC TRANSMISSION OF CUSTOMER STATEMENTS

Upon receipt of Customer's consent, R.J. O'Brien will provide daily confirmation and P&S statements and monthly statements of activity ("Statements") by electronic transmission to the email address indicated below and will no longer mail hard copies of such statements.

Customer warrants and represents that the below-referenced email will promptly print out the relevant Statements in the form transmitted by R.J. O'Brien. Customer acknowledges its understanding that there is a risk of failure of any electronic transmission, and will not hold R.J. O'Brien liable directly or indirectly for such failure. If Customer fails to receive any Statement that reflects activity of which you are aware of in the account, Customer agrees to contact an R.J. O'Brien customer service representative by 8:00 a.m. (Central Time) on the business day following the day of such activity.

This consent shall be effective until revoked in writing, signed by the undersigned and delivered to R.J. O'Brien at 222 South Riverside Plaza, Suite 900, Chicago, IL 60606. In addition, Customer agrees and acknowledges that for its protection and the

protection of R.J. O'Brien, any request to change the email address listed below must be in writing and bear the signature of the undersigned. Customer authorizes R.J. O'Brien to provide all Statements solely by electronic transmission. Customer requires R.J. O'Brien to provide all Statements by regular mail. Customer agrees and acknowledges that a fee of \$2.00 will be charged to Customer for each Statement mailed within the USA or a fee of \$3.00 for each Statement mailed outside the USA. This fee will be charged to Customer's account with R.J. O'Brien. (Note: This fee will also apply to duplicate Statements and will be charged to the Customer). Customer email address (Please Print) Date Print Customer Name **Customer Signature** Joint Party email address (Please Print) Date Print Joint Party Name Joint Party Signature I authorize R.J. O'Brien to send Statements by electronic transmission to the following Managed Account controller: Print Agent Name Agent email address (Please Print) I authorize R.J. O'Brien to send Statements by electronic transmission to the following Interested Party(ies):

Interested Party email address (Please Print)

Interested Party email address (Please Print)

Print Interested Party Name

Print Interested Party Name



HEDGE REPRESENTATION LETTER

(To Be Signed By Hedge Customers Only)

In order to induce R.J. O'Brien to open and maintain the undersigned's account, the undersigned represents that the transactions identified below in this account are for hedging or recognized risk management purposes only and shall be entered into solely for the purpose of protection against losses which may be incurred in a cash position in a specific commodity, or with respect to derivatives such as financial, interest rate or stock index futures, to protect against losses that may be incurred in an existing financial portfolio.

The following commodities are for bona fide hedging purposes.

<u>Commodity</u>	Economic Justification*
If Individual or Join	t Account:
If Individual or Join	

Joint Party Signature

Print Joint Party Name

The undersigned is familiar with all laws, rules and regulations concerning hedging in such contracts and has not relied upon R.J. O'Brien for any related advice.

This notification is a continuing one and shall remain in force until cancelled in writing. The undersigned acknowledges that R.J. O'Brien shall rely upon this representation and shall notify R.J. O'Brien immediately if this representation does not remain true and correct.

Commodity Futures Trading Commission Regulation 190.06(d) requires that a broker must provide an opportunity for each customer to specify when undertaking its first hedging contract whether, in the event of the broker's bankruptcy, such customer prefers that open commodity contracts held in a hedging account be liquidated by the trustee. Accordingly, please indicate below your preference for open contracts in your account if such an event were to occur.

I instruct that, in the event of bankruptcy of the broker, the trustee:

(INITIAL ONE) liquidate____ not liquidate____ open commodity positions in my hedge account without seeking my instructions.

or other entity: gn.)	
Date	
Date	
_	
	Date

Date

Rev 8/12R 18 ESTABLISHED IN 1914

^{*} Reason why account owner is using listed commodity as protection against loss in the cash market. (i.e. Corn Farmer, Mortgage Lender, etc.)



INTRODUCING BROKER AUTHORIZATION

To: R.J. O'Brien & Associates, LLC:

I/We wish to open a commodity futures (and/or options on futures) and/or foreign exchange account (hereinafter referred to as the "Account") with:

(Introducing Broker)

(hereinafter referred to as the "Introducing Broker" or "IB"). Because the IB is not a member of the various exchanges and may not be subject to exchange jurisdiction, I/we agree that my Accounts are to be carried with your firm on a disclosed basis. All documents must be appropriately completed and returned to R.J. O'Brien via my IB (along with margin funds) before an account can be opened in my name. Some of these forms are required by R.J. O'Brien, or by Federal laws, or exchange rules.

I/We understand that for a futures and/or options account:

(i) The relationship between R.J. O'Brien and its employees and the IB is only to clear trades introduced to you by the IB; (ii) the IB is not controlled by R.J. O'Brien; (iii) supervision and control of activity in my Account (s) rest with the IB, subject to exchange, government and NFA regulations; (iv) commissions charged to my Account (s) are established by the IB and that these charges include your fee for clearing my transactions, along with any applicable NFA fees.

I/We understand that for a foreign exchange account:

(i) The relationship between RJO and its employees and the IB is only to execute trades introduced to you by the IB; (ii) the IB is not controlled by RJO; (iii) the IB has access to view the activity in my account and may or may not be subject to CFTC and NFA regulations; (iv) commissions charged to my Account(s) are established by the IB and RJO.

I/We agree that R.J. O'Brien 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 myself that R.J. O'Brien'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 R.J. O'Brien from IB for and on behalf of myself in accordance with usual and customary practices. I/We agree to refrain from bringing any action or counterclaim against R.J. O'Brien and will assert any such claim against only the IB (or, when applicable, the non-employee commodity pool operator or commodity trading advisor) for any redress with respect to any matter other than R.J. O'Brien's gross negligence or willful misconduct in executing, clearing and/or accounting of transactions. With respect to R.J. O'Brien's guarantee, if any, of IB's obligations under the Commodity Exchange Act or CFTC regulations, I/we acknowledge that such guarantee is limited.

If Individual or Joint Account:	
XCustomer Signature	Date
Print Customer Name	
X	Date
Print Joint Party Name	

If Corporation, Partnership (All General Partners must sign	
Print Customer Name	
XAuthorized Signature	Date
Title	
XAuthorized Signature	Date
Title	_

Rev 8/12R 19 ESTABLISHED IN 1914



MANAGED ACCOUNT AGREEMENT - POWER OF ATTORNEY

The undersigned hereby authorizes

as his agent and attorney in fact (the "Agent") to buy, sell (including short sales) and trade in commodity futures contracts, options on commodity future contracts, physical commodities, foreign commodity futures contracts, and options on foreign commodity futures tracts, foreign commodities, forward contracts and contracts in the foreign exchange market on margin or otherwise in accordance with R.J. O'Brien's terms and conditions for the undersigned's account and risk in the undersigned's name or number on R.J. O'Brien's books. The undersigned hereby agrees to indemnify and hold harmless from and pay R.J. O'Brien promptly on demand for any and all losses arising therefrom or debit balance due thereon in the undersigned (s) account.

In all such purchases, sales or trades R.J. O'Brien are authorized to follow the instruction of the Agent in every respect concerning the undersigned's account through R.J. O'Brien; and the Agent is authorized to act for the undersigned and in the undersigned's behalf in the same manner and with the same force and effect as the undersigned might or could do with respect to such purchases, sales, or trades as well as with respect to all other things necessary or that would be incidental to the furtherance of conduct of such purchases, sales or trades.

The undersigned hereby ratifies and confirms any and all transactions with R.J. O'Brien heretofore made by the aforesaid Agent or for the undersigned account.

All duplicate statements should be sent to

(Insert name and address of authorized individual). Should authorized individual wish to receive statements via email, please complete Request for Transmission of Electronic Customer Statements.

The authorizations and indemnities in this Managed Account Agreement – Power of Attorney are in addition to (and in no way limit or restrict) any rights which R.J. O'Brien may have under any other agreements or agreements between the undersigned and R.J. O'Brien. R.J. O'Brien shall not have any liability for following the instructions of the Agent, and the undersigned shall never attempt to hold R.J. O'Brien liable for the Agent's actions or inactions.

The undersigned represents that the Agent has provided the disclosure document to the undersigned concerning the Agent's trading advice, including any options trading advice and the strategies to be used by the Agent, which the undersigned has read and understood, or, in the alternative, the Agent has furnished the undersigned with a signed written statement explaining the Agent's exemption from applicable registration and disclosure document requirements of the Commodity Futures Trading Commission and National Futures Association.

The undersigned understands that there are many strategies that can be used in trading options, some of which have unlimited risk of loss and could result in the undersigned sustaining a total loss of all funds in the account and the undersigned being liable for any deficit in such account resulting therefrom. The undersigned acknowledges that he has discussed with the Agent the nature and risks of the strategy to be used in connection with options to be traded for the account.

This Managed Account Agreement – Power of Attorney is also one and shall remain in force and effect until revoked by the undersigned by a written notice addressed to R.J. O'Brien and delivered to R.J. O'Brien's office at 222 South Riverside Plaza, Suite 900, Chicago, Illinois 60606; but such revocation shall not affect any liability in any way resulting from transactions initiated prior to such revocation. This authorization and indemnity shall inure to the benefit of R.J. O'Brien and any successor firm or firms irrespective of any change or changes at any time in the personnel thereof for any cause whatsoever, and of the assigns of R.J. O'Brien or any successor firm.

This Managed Account Agreement - Power of Attorney does not revoke any powers of attorney previously executed by the undersigned unless the undersigned gives written notice of revocation to the agent of any previously executed power of attorney.

The undersigned has read and understands the above and agrees to all terms and conditions therein.

This document creates a limited power of attorney between the undersigned as "Principal" and the Agent. If actually executed by the Principal within the State of New York, to be valid, Section 5-1501B of the General Obligations Law of the State of New York requires that the document be signed by both the Principal and Agent and that the document contain the following notices to the Principal and the Agent. (The text of the following notices to the Principal and Agent is prescribed by law and must be recited verbatim to the statute even though some portions are not applicable to powers of attorney given by individuals to their brokers or investment managers).



CAUTION TO THE PRINCIPAL/CUSTOMER (S)

Your Power of Attorney is an important document. As the "principal," you give the person whom you choose (your "agent") authority to spend your money and sell or dispose of your property during your lifetime without telling you. You do not lose your authority to act even though you have given your agent similar authority.

When your agent exercises this authority, he or she must act according to any instructions you have provided or, where there are no specific instructions, in your best interest. "Important Information for the Agent" at the end of this document describes your agent's responsibilities.

You can request information from your agent at any time. If you are revoking a prior Power of Attorney by executing this Power of Attorney, you should provide written notice of the revocation to your prior agent (s) and to the financial institutions where your accounts are located.

You can revoke or terminate your Power of Attorney at any time for any reason as long as you are of sound mind. If you are no longer of sound mind, a court can remove an agent for acting improperly.

Your agent cannot make health care decisions for you. You may execute a "Health Care Proxy" to do this. The law governing Powers of Attorney is contained in the New York General Obligations Law, Article 5, Title 15. This law is available at a law library, or online through the New York State Senate or Assembly websites, www.senate.state.ny.us or www.assembly.state.ny.us.

If there is anything about this document that you do not understand, you should ask a lawyer of your own choosing to explain it to you.

IMPORTANT INFORMATION FOR THE AGENT

When you accept the authority granted under this Power of Attorney, a special legal relationship is created between you and the principal. This relationship imposes on you legal responsibilities that continue until you resign or the Power of Attorney is terminated or revoked. You must:

- (1) Act according to any instructions from the principal, or, where there are no instructions, in the principal's best interest;
- (2) Avoid conflicts that would impair your ability to act in the principal's best interest;
- (3) Keep the principal's property separate and distinct from any assets you own or control, unless otherwise permitted by law;
- (4) Keep a record or all receipts, payments, and transactions conducted for the principal; and
- (5) Disclose your identity as an agent whenever you act for the principal by writing or printing the principal's name and signing your own name as "agent" in either of the following manner: (Principal's Name) by (Your Signature) as Agent, or (your signature) as Agent for (Principal's Name).

You may not use the principal's assets to benefit yourself or give major gifts to yourself or anyone else unless the principal has specifically granted you that authority in this Power of Attorney or in a Statutory Major Gifts Rider attached to this Power of Attorney. If you have that authority, you must act according to any instructions of the principal or, where there are no such instructions, in the principal's best interest.

You may resign by giving written notice to the principal and to any co-agent, successor agent, monitor if one has been named in this document, or the principal's guardian if one has been appointed. If there is anything about this document or your responsibilities that you do not understand, you should seek legal advice.

Liability of the agent: The meaning of the authority given to you is defined in New York's General Obligations Law, Article 5, Title 15. If it is found that you have violated the law or acted outside the authority granted to you in the Power of Attorney, you may be liable for your violation.

EXECUTION BY PRINCIPAL/CUSTOMER(S):				
I have signed Agreement this	– Po	wer	of	Attorney
XSignature of Pro-	rincipal/Custo	omer		
XSignature of Jo	oint Principal/	Joint Cus	tomer	

AGENT'S SIGNATURE:	
Power of Attorney. I am the Agent for the Principal name legal responsibilities. I ha	Ianaged Account Agreement – person (s) identified therein as ed therein. I acknowledge my ve signed my name to this nent – Power of Attorney —, ——.
Print Agent's Name	Social Security # of Agent
Agent Occupation	Agent Employer
Agent Principal Business	Agent Phone Number
Agent Email Address	
X	
Signature of Agent	

Rev 8/12R 21 ESTABLISHED IN 1914



EXEMPT COMMODITY TRADING ADVISOR LETTER

(NOTE: If the individual or entity who is being given power of attorney is neither an immediate family member nor registered CTA/CPO, the following form is to be completed and signed.)

I/WE		, the undersigned account controllers have discretionary trading
autho	rity over your account titled	(Acct.#).
You l Comi	nave not been provided with a disclosure documodity Exchange Act.	ument because I am/we are operating pursuant to an exemption from the
I am/	we are exempt from registering as a CTA because	ause I/we: (circle applicable letter)
A)	Have provided advice to 15 or fewer person public as a CTA.	ons over the past 12 months and do not hold myself (ourselves) out to the
B)		der in cash market transactions of any commodity (or product thereof) and solely incidental to the conduct of its cash market business.
C)		ship, trade association or farm organization and the person's commodity onduct of its business as such association or organization.
D)	Am/Are a foreign-based entity, located out	tside the U.S. and I/we only solicit non-U.S. citizens.
XSig	gnature ted Name	
Cu	stomer Acknowledgement:	
_	gnature	
Pri	nted Name	Date
X_ Jo	oint Party Signature	
Pri	nted Joint Party Name	Date

Rev 8/12R 22 ESTABLISHED IN 1914



ADDITIONAL RISK DISCLOSURE STATEMENT

Dear Sir or Madam:	
As a result of the following information on your accounrisk disclosure before you open a commodity future and op	nt application, R.J. O'Brien is providing you with their additional ption trading account:
Your annual income is less than \$25,000	
Your net worth is less than \$25,000	
You are retired	
You do not have at least six months of futures invo	estment experience
trading commodity futures and options. The risk of loss may be inappropriate for you for the reason checked above light of your financial condition. Only Risk Capital (r	it is required to advise you to consider the risks involved with a in trading commodity futures and options can be substantial and ve; therefore, you must consider whether such trading is proper in money that you are able to lose without adversely affecting your destinated that you review the Risk Disclosure Statement in the Account or other financial advisor before finalizing your decision.
ACKNOWLEDGEMENT I understand that the risks associated with commodity tra Risk Disclosure Statements and I have considered the fi financial condition, and I wish to proceed with opening an	rading may not be appropriate for me. However, I have read the financial risks involved in commodity trading with regard to my n account.
If Individual or Joint Account:	If Corporation, Partnership, or other entity: (All General Partners must sign).
X	Print Customer Name
Print Customer Name	XSignature
X	Title Date X_ Signature
Print Joint Party Name	Title Date

23 **ESTABLISHED IN 1914** Rev 8/12R



ACKNOWLEDGEMENT OF DISCLOSURES

Disclosure of Futures Com	mission Merchant Mate	rial Conflicts of Interest	
Electronic Trading and Ord	der Routing Systems Dis	closure Statememt	
Management("LIFFE")		ctions Carried Out On LIFFE	E Administration and
Uniform Notification Rega	rding Access To Market	Data Initials	
Notice Regarding Average		nitials	
Disclosure On Payment Fo	r Order Flow and Cross	Frade Consent Initials	
Direct Order Transmittal (Client Disclosure Statem	nent Initials	
Foreign Trader Disclosure	Statement Initials		
Notice To Clients Position Futures Traded On The He			ments For Options and
Erisa 408(b)(2) Disclosure	Enitials	Initials	
A Guide to the Structure a	nd Market Terminology	of the London Metal Excha	Initials
I have received above all the above provided	-	arate RJO Disclosure Bo	ooklet and understand
Print Name		Print Name (for additional	al parties)
Title		Title	
Signature	Date	Signature	Date



<u>Disclosure Letter Regarding Settlement, Carrying and Clearing of Contracts Listed on the London Metal Exchange ("LME")</u>

Dear Clients:

Because R.J. O'Brien & Associates, LLC ("RJO", "we" or "us") is not itself a member of the LME, we have put in place the following process with Jefferies Bache Limited a UK-based member of the LME, which is authorized and regulated in the United Kingdom by the Financial Conduct Authority ("JBL"), to facilitate the settlement, carrying and clearing of your transactions on the LME. Accordingly, unless we advise you otherwise in writing, your counterparty on each LME transaction that you settle and carry through us will be JBL.

The salient aspects of this process are as follows:

- RJO, as your FCM, will establish an account on your behalf with JBL specifically referencing your name through which your LME transactions shall settle and be carried. This account will be margined separately from any other accounts we may open with JBL for the purpose of facilitating customer transactions on the LME.
- 2. Any LME trades that you elect to settle and carry through us will be transmitted by us as your agent and FCM to JBL for clearing on the LME. Generally, we will post only cash margin to support your LME Trades and JBL has agreed to maintain any such cash margin posted on your behalf pursuant to FCA's Client Money Rules. The arrangements described in this letter have been put in place to enable you to receive LME registered contracts as principal to such contracts with JBL who is the LME member and able to issue LME registered contracts pursuant to LME rules.
- 3. Although you will not have a direct account with JBL, JBL will be informed on each occasion when LME contracts are to be cleared on your behalf and will clear the position accordingly. As a result, you will be the principal counterparty with JBL to any LME registered contracts and JBL will identify you as the beneficial owner of the contracts when reporting position information to the LME. In addition, you will receive on a T+1 basis a daily account statement from RJO, which will reflect, among other things, any LME contracts cleared and carried for you.
- 4. By signing this letter, you acknowledge that each LME contract you settle and carry through us will be registered with the LME by JBL, and as such, will be subject to the Rules and Regulations of the LME. Your LME counterparty for the purposes of issued LME registered contracts will be JBL. R J O is, therefore, only acting in an agency capacity in respect of each LME contract you settle and carry through RJO.

Rev 8/12R 25 ESTABLISHED IN 1914



5. Further information on LME market operations may be found in the Risk Disclosure Booklet furnished to you in connection with the opening of your RJO account.

Very Truly Yours,

R.J. O'Brien & Associates, LLC

Acknowledged and Agree	ed		
Customer Name:			
RJO Account Number(s):			
Ву:			
Signatory Name:			
Signatory Title:			
Date:			
Please add the following information.	customer address info	ormation. RJO will not be able to	accept the disclosure without this
Street Address:			
City:	State:	Postal Code:	
Country:			



INTERNAL REVENUE CODE SUBSTITUTE FORM W-9

Social Security Number	Federal Employer ID Number
Legal Account Name:	
NOT sign below, R.J. O'Brien must generally withhold 20% of	identification number (usually your Social Security number) and do f certain income from your account. I hereby certify under penalties r the provisions of Section 3406 (a)(1)(c) of the Internal Revenue
X	
Signature	Date

Please note that all required regulatory information reporting applicable to activity within this account (including Internal Revenue Service reporting) will be submitted with the legal name and Federal Tax Identification Number stated above.

Please note that all Foreign Accounts must fill out a form W-8 which can be found on the R.J. O'Brien website at www.rjobrien.com. In addition, this account form must be accompanied by a copy of your passport or other governmental identification.

Rev 8/12R 27 ESTABLISHED IN 1914



R.J. O'BRIEN & ASSOCIATES, LLC ACCOUNT TRANSFER

CURRENT BROKERAGE HOUSE:	
Account #	
Gentlemen:	
	Brien") this form and my permission for them to present it to you Frading Commission Act, I hereby demand that upon presentation
Please cancel any pending open orders I have with your firm open futures and options positions, cash, margins, or securities to	. Additionally, immediately transfer my account balance and all o:
R.J. O'Brien 222 South Riverside Plaza, Suite 900 Chicago, IL 60606	
Send me a confirmation of this transfer.	
Very truly yours,	
If Individual or Joint Account:	If Corporation, Partnership or other entity:
Print Customer Name	Print Entity Name
XCustomer Signature	
Customer Signature	Print Authorized Individual's Name
D.,	XAuthorized Individual's Signature
Date	Authorized individual's Signature
	Title
Print Joint Party Name	
XJoint Party Signature	Date
Date	
RJO Account #:	

Rev 8/12R 28 ESTABLISHED IN 1914