

1. Parties

This agreement, which includes your application for an Account (as such term is defined below), the content of this document, and all additional agreements, and separate and supplemental disclosures, disclaimers and other documents contained in the application or later provided to you that relate to your Account and which you have been required to acknowledge and accept (collectively, "**the Agreement**" or "**this Agreement**"), is between you and TradeStation Securities, Inc. ("**TradeStation Securities**," "**we**," "**us**" or "**our**"). Your "**Account**" means, individually and collectively, the futures brokerage account or accounts you are opening or have opened or later open with us regarding your interests and transactions in commodity and financial futures contracts, and, if you have been approved (or if you later request and are approved), options on futures, and as otherwise described under the definition of "**Contracts**" in the section under the heading "**Contracts**." You agree that each of TradeStation Securities' affiliates is an express third-party beneficiary of this Agreement. However, you also understand and agree that no entity other than TradeStation Securities is making any representation, obligation or covenant in your favor under or related to this Agreement or your Account or the "**Services**" (as defined in the section headed "**Service Commissions, Fees and Other Costs**"), and that you have no contractual or other legal right or remedy of any kind or nature against any affiliate of TradeStation Securities by reason of or relating to this Agreement, your Account, the Services or any of the transactions contemplated by this Agreement or relating to your Account or the Services.

THIS AGREEMENT CONTAINS A PRE-DISPUTE ARBITRATION AGREEMENT UNDER THE HEADING "ARBITRATION."

2. Request for Electronic Transmission of Statements and Other Documents and Information

You hereby request that all confirmation statements of activity and all periodic account statements, as well as all tax documents, be delivered to you solely by electronic transmission to the e-mail address indicated by you in the Agreement. **YOU REPRESENT TO US THAT YOU DO NOT WANT TO BE MAILED HARD COPIES OF ANY SUCH STATEMENTS, DOCUMENTS OR INFORMATION.** You warrant and represent that the above-referenced e-mail will promptly print out for you the relevant customer statements, documents and information in the form received by you. You understand that there is a risk of failure of any electronic transmission, and will not hold TradeStation Securities liable directly or indirectly for such failure. If you fail to receive a statement of activity of which you are aware, you will contact a TradeStation Client Service representative at the Brokerage Client Service telephone numbers posted on the TradeStation company website on the business day following the day of any such activity. You acknowledge that if you choose not to accept electronic statements and documents, TradeStation Securities may charge your Account a fee for each hard-copy statement and document delivered. This consent shall be effective until revoked by you in writing, and delivered to TradeStation Securities. In addition, you acknowledge that, for your protection and the protection of TradeStation Securities, any request to change the e-mail address designated in your Agreement must be in writing and must bear the same signature as the one in your Agreement or that we have on file,

or otherwise satisfy our authentication and verification procedures. In the event such a request is received from a legal entity, such as a corporation, LLC or partnership, the request must be accompanied by appropriate documentation establishing that the person signing the request possesses the requisite authority to bind the entity. BY ACCEPTING THIS AGREEMENT, YOU ACKNOWLEDGE YOU HAVE REQUESTED, AND CONSENTED TO, THE DELIVERY TO YOU OF YOUR CONFIRMATION AND OTHER ACCOUNT STATEMENTS, AS WELL AS TAX DOCUMENTS, SOLELY BY ELECTRONIC TRANSMISSION TO YOUR SPECIFIED E-MAIL ADDRESS.

3. Contracts

Your Account will offer to you, as a self-directed online investor or trader, services connected to the purchase and sale of commodity (including financial and index) futures contracts, options on futures contracts, and any other approved exchange-based futures or futures options contracts we offer from time to time and agree to make available to you (individually, a “**Contract**” and collectively, “**Contracts**”).

4. Account Risks

You acknowledge, understand and accept the following 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 NORMALLY UTILIZED AND THE VOLATILE PRICE MOVEMENTS WHICH CAN OCCUR IN CONTRACTS MARKETS, THE POSSIBILITY OF RAPID AND SUBSTANTIAL LOSSES IS CONTINUALLY PRESENT;*
- (c) *TRADING IN CONTRACTS IS APPROPRIATE ONLY FOR THOSE PERSONS FINANCIALLY ABLE TO WITHSTAND SUBSTANTIAL LOSSES, SOMETIMES GREATLY EXCEEDING THE VALUE OF THEIR MARGIN DEPOSITS; AND*
- (d) *CONTRACTS MARKETS CAN EXPERIENCE SEVERE ILLIQUIDITY, WHICH MAY RESULT IN MARGIN CALLS FOR LARGE AMOUNTS, AND WHICH TRADESTATION SECURITIES MAY ADDRESS, IN ITS DISCRETION, WITH OR WITHOUT NOTICE TO YOU, BY LIQUIDATING YOUR POSITIONS OR ENTIRE ACCOUNT, WHICH MAY RESULT IN SUBSTANTIAL LOSSES TO YOU, INCLUDING LOSSES GREATLY EXCEEDING THE AMOUNTS YOU HAVE DEPOSITED.*

5. Laws, Rules, and Regulations and Indemnification

All of your transactions shall be subject to all applicable laws, rules and regulations of any state, federal, regulatory or self-regulatory statutory authority, agency, exchange, market, association, commission or other body, including, without limitation, the rules and regulations of the Securities and Exchange Commission, the Commodity Futures Trading Commission (“**CFTC**”), the CME Group’s Market Regulatory Department, the National Futures Association, the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, as amended, the Board of Governors of the Federal Reserve

System, and any exchanges, markets, associations, or clearing houses or agencies where any transaction is executed, or which have jurisdiction over the transaction or any of the parties involved in the transaction (collectively, "**Applicable Laws**"). TradeStation Securities shall not be liable to you as a result of any action taken by TradeStation Securities to comply with any such Applicable Laws. TradeStation Securities' violation of any exchange or other self-regulatory organization's regulations shall not provide you with either a defense to a claim by TradeStation Securities or the basis of a claim against TradeStation Securities. In the event that you are a regulated institution or entity, you recognize and acknowledge that you may be required to comply with regulations including, but not limited to, the Commodity Exchange Act, and that TradeStation Securities has no obligation to insure that you abide by the rules and regulations pertaining to you. You agree to indemnify TradeStation Securities and its employees, agents and affiliates from and against all claims (including claims brought by you or on your behalf), including reasonable attorneys' fees and costs, arising out of your use of any products or services provided by TradeStation Securities or its affiliates or other acts or omissions by you or on your behalf which violate, or conflict with, any of such Applicable Laws.

6. Service Commissions, Fees and Other Costs

TradeStation Securities agrees to provide you with futures brokerage services in your Account, which include providing you with one or more automated or electronic execution systems (an "**EES**") and other services (collectively, "**Services**") pursuant to the terms and conditions of this Agreement, as well as your agreement with our affiliate that provides TradeStation® trading software technology and internet-based market data services, and the terms and conditions of use for any EES of a third party provided to you by TradeStation Securities or its affiliate, in connection with your use of your Account. Your Account will be charged, and you agree to pay, all brokerage commissions and other fees in connection with the execution of transactions ("**Execution Fees**") and will or may be charged, and you agree to pay, certain other fees for all other products and services furnished to you ("**Service Fees**"). Execution Fees may be changed from time to time without prior notice to you and Service Fees may be changed from time to time upon thirty (30) days' prior written notice to you and, in each case, you agree to be bound thereby. You understand and agree that notice may be given by modifying the fees and rates published on the TradeStation company website and that such modification shall constitute written notice to you on the date such modifications first appear on the website. You also agree that e-mails to you constitute written notice to you on the date sent as long as the e-mails are sent to an e-mail address provided by you. There are also other ways we may modify this Agreement and our business relationship, as well as other ways we may notify you, which are discussed later in this Agreement under the heading "**Amendment by TradeStation; Presumptive Receipt of Communications.**" Any interest accrued in any Account on excess cash balances shall be retained by TradeStation Securities. TradeStation Securities shall be under no obligation to pay or account to you for any interest income or benefits that may be derived from or use of client monies, reserves, deposits, cash equivalents or any other property.

7. Assumption of Risk/Your Discretion

(a) TradeStation Securities is not a full-service brokerage, and only serves self-directed online traders. We do not engage in discretionary trading, render investment advice, trading advice or financial planning services, recommend account types, perform or share investment research or analysis, participate in private placements or make markets or deal in individual securities, commodities, futures contracts, options or other derivative products. TradeStation Securities is an agency-only brokerage firm the services of which consist mainly of the provision to you of a sophisticated EES which you, as a self-directed or professional trader, may use to make and execute your own trading decisions. Accordingly, TradeStation Securities will not provide you with any legal, tax, accounting, investment, trading, planning or other advice of any kind. TradeStation Securities' employees and agents are not authorized to give you any such advice, and you agree that you will not solicit or rely upon any such advice or purported advice from any such employee or agent of TradeStation Securities, whether in connection with transactions in or for your Account, or otherwise. You acknowledge and agree that if you receive any such advice or purported advice from any employee or agent of TradeStation Securities or any of its affiliates, it was improperly given to you, should not be relied upon, you will totally disregard it, and, if you do not, you fully assume the risk of following or relying upon any such advice or purported advice.

(b) You further acknowledge and agree that you have independently evaluated any EES or other Services you intend to use. You agree and acknowledge that any trading or execution strategies or transactions designed, programmed or implemented through any EES or any other Services provided by TradeStation Securities or its affiliate or any third-party provider shall be at your sole discretion and risk, regardless of any information, examples, tutorials, user education documentation, training, consulting services, comments, guidance, charts, indicators, graphs, simulated performance reports, strategy techniques, or other analyses obtained in any form from TradeStation Securities or any of its officers, directors, employees or agents, or from accessing or using any EES or website. You acknowledge and agree that the sole purposes of any of the foregoing tools and services are to help you learn how better to use TradeStation® trading software or to help you correctly program, test and/or automate or otherwise implement your trading strategies or ideas. You further acknowledge and agree that while you may be able to access through an EES or other Services investment research reports, examples of strategies, and market data services, the availability of such information does not constitute a recommendation to buy or sell any particular security, commodity, contract, option or other derivative or the likelihood of success of using any trading strategy tools. Any investment or trading decisions you make will be based solely on your own evaluation of your financial circumstances and investment or trading objectives.

8. Limitations and Restrictions

You are authorized to use the EES and other Services and materials provided by or through TradeStation Securities for your own needs only, and you are not authorized to resell access to any such services or materials or to make copies of any such materials for sale to, or use by, others. You

shall not delete any copyright or other intellectual property rights notices from any such materials. Your right to use any EES or other Services provided by TradeStation Securities is limited to executing your own proprietary trades. You shall be the only authorized user of any Services provided by TradeStation Securities. All orders executed through any EES or other Services provided to you shall be deemed authorized by you and executed with the understanding that an actual purchase or sale is intended and that you are unconditionally and irrevocably accepting a valid and binding legal obligation. You agree that all purchases and sales shall be for your Account in accordance with your oral, written or electronic orders or instructions; provided, however, you acknowledge and understand that the only valid way to place an order using the Services is to place it through your EES or to phone-in your order live to TradeStation Securities' trade desk. You hereby waive any and all defenses that any such order or instruction was not in writing as may be required by the Statute of Frauds or any Applicable Laws.

9. Limitation of Liability Of TradeStation Securities for Acts of Other Brokers

TradeStation Securities will execute your transactions solely as your agent. In executing transactions on an exchange, TradeStation Securities may utilize other brokers, or carrying brokers, but will not be responsible to you for negligence or misconduct of another broker or carrying broker if, at the time the broker or the carrying broker acted or failed to act, the broker or carrying broker was authorized to act as such under the rules of the relevant commodity exchange and the appropriate regulatory agency. TradeStation Securities will not be responsible to you in the event of error, failure, negligence, or misconduct on the part of any other broker, carrying broker, commodity trading advisor, or other person acting on your behalf and, without limiting the foregoing, TradeStation Securities has no obligation to investigate the facts surrounding any transaction in your Account involving any other broker, commodity trading advisor, or other person, except as required by Applicable Laws.

10. Disclaimer of Warranties

You acknowledge and agree that neither TradeStation Securities nor its employees or agents or affiliates make any warranties or representations with respect to any EES or other Services provided by TradeStation Securities or its affiliates, or third parties, relating to this Agreement or your Account, including any related hardware, software, communication system or any charting, analysis or other trading strategy tool products, services or platforms. TRADESTATION SECURITIES' SERVICES AND ANY INFORMATION, DATA, CHARTING, ANALYSIS OR OTHER TRADING STRATEGY TOOL PRODUCTS, SERVICES OR PLATFORMS ARE PROVIDED ON AN AS-IS, WHERE-IS, AS-AVAILABLE BASIS AND WITHOUT WARRANTIES OF ANY KIND, EXPRESS, IMPLIED OR STATUTORY (INCLUDING, WITHOUT LIMITATION, TIMELINESS, TRUTHFULNESS, SEQUENCE, COMPLETENESS, ACCURACY, OR FREEDOM FROM ERROR OR INTERRUPTION), OR ANY IMPLIED WARRANTIES ARISING FROM TRADE USAGE, COURSE OF DEALING, OR COURSE OF PERFORMANCE, OR THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE. YOU AGREE THAT, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAWS, TRADESTATION SECURITIES SHALL NOT HAVE ANY LIABILITY TO YOU FOR

CONSEQUENTIAL, INCIDENTAL, PUNITIVE, SPECIAL OR INDIRECT DAMAGES OR LOSSES OF ANY KIND, EVEN IF YOU HAVE INFORMED TRADESTATION SECURITIES OF THE POSSIBILITY OR LIKELIHOOD OF SUCH DAMAGES OR LOSSES. IN ALL MATTERS YOU HEREBY AGREE THAT ANY CLAIM FOR PUNITIVE DAMAGES SHALL BE LIMITED TO THE FULLEST EXTENT, IF ANY, PERMITTED BY THE RULES OF THE CFTC AND/OR THE RULES OF THE ARBITRATION FORUM WHERE THE CLAIM IS HEARD AND OTHER APPLICABLE LAWS, AND YOU OTHERWISE WAIVE ANY RIGHT TO PUNITIVE DAMAGES TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAWS.

11. Assumption of Risk; Technical Issues or Extraordinary Events

You agree that TradeStation Securities shall not be liable for, and you fully and knowingly assume all risks of, and shall indemnify and hold TradeStation Securities and its employees, officers, directors, shareholders, affiliated companies and agents harmless from and against, any and all claims (including claims by or through you) or loss(es) or other negative results, actual or perceived, caused directly or indirectly by any equipment or software failure, software design limitation or flaw, software bug or virus, failure of any internet service provider, operator error, failure of any electronic or mechanical equipment, hardware, communication system or other system, or any component thereof, telephone or other interconnect problems, unauthorized access, theft, security breach, government restriction, exchange or market regulation, suspension of trading, war, terrorism, cyberterrorism, or strike or other labor dispute. Without limitation of the foregoing, this includes any of the foregoing conditions, items, events or occurrences that might prevent you from utilizing, or that may limit or corrupt the use of, any EES or other Services provided by TradeStation Securities, including, without limitation, conditions, items, events or occurrences that cause or result in an inability or failure to initiate, execute, cancel or modify an order or transaction or that cause other unintended results. You further acknowledge and agree that, except as expressly set forth in this Agreement, you will not be compensated by TradeStation Securities for any "lost opportunity" (e.g., an increase in the value of a futures contract you wished to purchase, or a decrease in value of a futures contract you wished to sell, or transactions you may make based on information shown or not shown to you by your computer which was incorrect or omitted or otherwise inaccurate or delayed in its delivery to you), even if such difficulty could have been prevented by TradeStation Securities. To the fullest extent permitted by Applicable Laws, you fully assume all risks related to each and every one of the foregoing items, conditions, events and occurrences. See, also, the information in the section under the heading "Trading and Order Routing Disclosure Statement for Futures Trades."

12. Termination, Trading Restrictions, Liquidation

You acknowledge and agree that TradeStation Securities may, at any time, in its sole discretion and without prior notice, terminate your Account or restrict or prohibit trading of Contracts and/or other derivatives or other property in your Account for any reason. Without limitation of the breadth of the foregoing rights, TradeStation Securities may in its sole discretion restrict trading in your Account to closing transactions only. You shall, in all such events, nevertheless remain responsible and liable for all

of your obligations and liabilities to TradeStation Securities and its affiliates under this Agreement. *You further agree that, notwithstanding anything in this Agreement to the contrary, in the event that the Account is under-margined (as we, in our sole discretion, determine), has zero equity or an equity deficit at any time, TradeStation Securities shall have the right to liquidate all or any part of your positions through any means available, without prior notice to you. See, also, the section under the heading "Margin and Other Collateral Requirements."*

13. Automated Trading

Automated trading functionality is designed to help you follow or track more Contracts simultaneously and to assist in removing emotions from, and to increase efficiencies in, your trading. Automated trading functionality is not designed to allow you to leave your computer, screen or mobile phone unattended. If you, or any person you have authorized to trade your Account, uses any automated trading functionality, you hereby acknowledge and agree that there are numerous factors that may cause the automated trading functionality to send orders that you do not want, and/or fail to send orders that you do want (including, without limitation, ISP failure, power failures or surges, erroneous, delayed or out-of-sequence data, improperly designed strategies, and software or system design limitations, flaws or errors). You hereby acknowledge and assume all risks, both known and unknown, associated with using any automated trading functionality, and agree that it is your responsibility to understand precisely how it works before using it, to monitor the trading activity in your Account at all times, and to immediately take corrective action when necessary.

14. Confirmation Reports and Account Statements

Confirmation reports of the execution of orders shall be conclusive if not objected to in writing by you within the shorter of (a) the applicable settlement cycle of the subject transactions and (b) three (3) business days after such documents have been transmitted to you. Statements of account shall be conclusive if not objected to in writing by you within ten (10) days after transmission. In all cases, TradeStation Securities reserves the right to challenge your objections.

15. Offsetting Positions

If you maintain separate Accounts in which, pursuant to CFTC Rule 1.46 (d)(6), offsetting positions are not closed out, you acknowledge that, if held open, offsetting long and short hedge positions in those separate Accounts may result in you being charged additional fees and commissions and the payment of additional margin, even though your offsetting positions will result in no additional market gain or loss to you.

16. Market or Other Data

You acknowledge and agree that each national or regional market exchange or association asserts a proprietary interest in all of the market or other data it furnishes to parties that disseminate its data. YOU ACKNOWLEDGE AND AGREE THAT NEITHER TRADESTATION SECURITIES, NOR ANY EXCHANGE OR ASSOCIATION OR ANY SUPPLIER OF MARKET OR OTHER DATA, GUARANTEES

THE TIMELINESS, SEQUENCE, ACCURACY, COMPLETENESS, RELIABILITY OR CONTENT OF MARKET OR OTHER INFORMATION OR MESSAGES DISSEMINATED TO, BY OR THROUGH ANY PARTY, INCLUDING ANY INTERNET SERVICE PROVIDER. YOU ACKNOWLEDGE AND AGREE THAT NEITHER TRADESTATION SECURITIES NOR ANY EXCHANGE OR ASSOCIATION OR ANY OTHER SUPPLIER OF MARKET OR OTHER DATA REPRESENTS OR WARRANTS THAT THE SERVICE WILL BE UNINTERRUPTED OR ERROR FREE. YOU AGREE THAT YOUR USE OF ANY MARKET OR OTHER DATA IS SOLELY AT YOUR RISK. NEITHER TRADESTATION SECURITIES NOR ANY EXCHANGE OR DATA PROVIDER SHALL BE LIABLE FOR ANY INACCURACY, ERROR OR DELAY IN, OR OMISSION OF, ANY SUCH DATA, INFORMATION OR MESSAGE, OR THE TRANSMISSION OR DELIVERY OF ANY SUCH DATA, INFORMATION OR MESSAGE, OR ANY LOSS OR DAMAGE ARISING OR OCCASIONED THEREFROM, REGARDLESS OF THE SOURCE, CAUSE OR REASON THEREFOR. You understand that the terms of this Agreement may be enforced directly against you by the securities and futures exchanges and associations or other parties providing market or other data. You shall use any such data or information (including quotes) only for your individual use and shall not furnish such data to any other person or entity.

17. Stop Orders

Placing stop orders using an EES has risks that regular market and limit orders do not. A stop order is held by the EES's stop order server and then automatically released to the appropriate avenue of execution when the EES recognizes information which indicates that the stop order price condition has been met. The price information comes from the exchanges and/or data providers and there are often "bad ticks" (inaccurate, out-of-sequence, etc.) or ticks that appear to be bad but are not (they may simply look irregular, unusual or problematic). The EES is designed to filter as many "bad ticks" as reasonably possible. However, there are times that bad ticks will not be filtered, and other times when the stop order server will mistakenly filter good ticks that looked unusual at the time. This may result in your stop order being executed at a price different than the one you specified, or not being released for execution when your price condition has been met. IF YOU USE AN EES'S STOP ORDER FUNCTIONALITY, YOU FULLY ASSUME THESE RISKS AND ALL OTHER RISKS THAT EES DESIGN LIMITATIONS OR EXCHANGE OR VENDOR DATA SERVICE INACCURACIES OR FLAWS MAY PRESENT.

18. Program Trading

You understand and acknowledge that TradeStation Securities offers neither arbitrage accounts nor proprietary systems for Program Trading (or any other purpose).

19. Use of Investment Advisors

If you have an agreement with an investment or trading advisor or manager or a CTA or CPO of any kind (as the case may be, an "investment advisor") whom you have engaged to invest and trade your funds and assets on your behalf, and whom you have authorized to trade your Account with TradeStation Securities (or on whom you are otherwise relying in any manner), you represent, warrant,

acknowledge and agree that: (a) as between you and TradeStation Securities, solely you are fully responsible for all acts, omissions and decisions and advice made by your investment advisor with respect to your Account, and you shall fully indemnify and hold harmless TradeStation Securities, and its affiliates, employees and agents, from and against any and all claims, damages, liabilities, losses, costs and expenses (including reasonable attorneys' fees and costs) that arise from, or relate to, any of such acts, omissions or decisions or advice, including, but not limited to, claims, damages, liabilities, losses, costs or expenses assertible or suffered by you or your Account, and claims which successors, constructive assignees, third parties or others may assert by or through you or on your behalf, or on their own behalves; and (b) your investment advisor may give us instructions, which may be changed by your investment advisor from time to time, concerning amounts that are to be withdrawn from your Account and paid to your investment advisor (or your investment advisor's account with us) as and for your investment advisor's fees, charges or costs payable by you pursuant to your agreement with your investment advisor, and TradeStation Securities is authorized by you to rely fully and completely upon your investment advisor's instructions with no obligation or responsibility to verify the authenticity, validity or accuracy of such instructions either with you or any other person or entity, or any document or other material or potential source of such information.

20. Margin and Other Collateral Requirements

(a) ***Margin trading is highly risky and may result in a loss of funds greater than you have deposited in your Account.*** You hereby agree to deposit and at all times maintain such margin in your Account as TradeStation Securities may in its sole discretion require, and which may change from time to time in TradeStation Securities' sole discretion, and you agree to pay on demand any debit balance owing with respect to your Account. You agree at all times to maintain such margin in your Account as TradeStation Securities may from time to time (at its sole discretion) require, and will meet all margin calls promptly (if any margin calls are issued, and none are required to be issued) immediately. You further agree to deposit promptly and maintain such other collateral with TradeStation Securities as is required by Applicable Laws or any other agreement or open transaction you may have with TradeStation Securities, or as required by TradeStation Securities at any time or from time to time in its discretion. You agree that, if requested to do so, you will promptly wire transfer such funds.

(b) ***You further agree that, notwithstanding anything in this Agreement to the contrary, in the event that the Account or any part thereof is under-margined (as we, in our sole discretion, determine), has zero equity or an equity deficit at any time, TradeStation Securities shall have the right to liquidate all or any part of your positions through any means available, without prior notice to you. TradeStation Securities does not have to notify you of any failure to meet margin requirements prior to TradeStation Securities exercising its rights under this Agreement. You acknowledge that TradeStation Securities generally will not issue margin calls, generally will not credit your Account to meet intraday or overnight margin deficiencies and is authorized to liquidate account positions in order to satisfy margin requirements without prior notice.*** Any margin call or other notice we ever do give you is or was solely as a courtesy, and our doing so imposes no obligation on us to ever do so again, and you should not expect or rely on receiving any such notice. Margin calls, if given, may be

communicated orally, without subsequent written confirmation. Further, if TradeStation Securities does not, for any reason, liquidate under-margined positions without notice, and issues a margin call, you must satisfy such margin call in its entirety immediately by depositing funds. You acknowledge that even if a call is issued, TradeStation Securities may still liquidate your positions at any time.

(c) If at any time your Account does not contain the amount of margin determined by TradeStation Securities, in its sole discretion, to be appropriate for any reason (in its sole judgment), *TradeStation Securities may, at its sole discretion, reject any order made by you, close out your positions in whole or part, "straddle" or "spread" open positions, switch positions to another month, commodity or exchange, limit and/or terminate your right to trade in the Account other than for liquidation, or fully or partially liquidate all or some of the positions in your Account. TradeStation Securities is authorized to take whatever action it deems necessary including, without prior demand or notice to you, hedging and/or offsetting of your positions in a cash market, selling or otherwise liquidating any property belonging to you or in which you have an interest, buying or borrowing any property required to make delivery against any sales, including short sales, effected for your Account or otherwise liquidating the positions in your Account, all solely for your Account and solely at your risk.* Any such liquidation, sale or purchase may be public or private and may be made without notice to you and in such manner as TradeStation Securities may, in its sole discretion, determine.

(d) TradeStation Securities may, at its sole discretion, require margin in excess of that required by Applicable Laws, including any exchange or clearinghouse minimums. *We may modify margin requirements for any or all customers, including you, for any open or new positions at any time, in our sole discretion.* All deposits shall be deemed made only when cleared funds are actually received by TradeStation Securities, which may include waiting periods it, in its sole discretion, imposes on ACH or similar electronic transfers. Any failure by TradeStation Securities to call for margin at any time shall not constitute a waiver of TradeStation Securities' right to do so any time thereafter, nor shall such failure create any liability to TradeStation Securities. TradeStation Securities shall not be liable to you for the loss or loss of use of any margin deposits option premiums, or other property, which is the direct or indirect result of bankruptcy, insolvency, liquidation, receivership, custodianship, or assignment for the benefit of creditors of any bank, other clearing broker, exchange, clearing organization or similar entity.

(e) TradeStation Securities may, for any reason, require you to transfer your Account to another firm. If you do not transfer your positions promptly upon demand by TradeStation Securities, TradeStation Securities may liquidate the positions in your Account and you agree to indemnify and hold TradeStation Securities harmless from any and all losses resulting from such liquidation. TradeStation Securities is under no obligation to offer you the ability or opportunity to transfer your Account to another firm, and we may take any and all actions permitted in this Agreement, including in this section, without doing so.

(f) You acknowledge that TradeStation Securities is hereby specially authorized, for its account and benefit, from time to time and without notice, 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) held by you in your Account and TradeStation Securities shall not at any time be required to deliver to you such identical property but may fulfill its obligation by delivery of property of the same kind and amount.

(g) No demands, calls, tenders or notices that TradeStation Securities may have made or given in the past shall obligate TradeStation Securities to make or give the same in the future, and no failure to make or give any such demand, call, tender or notice shall constitute a waiver or limitation of any kind of any of TradeStation Securities' rights or remedies under this Agreement or otherwise.

21. Satisfaction of Your Liabilities; Security Interest and Lien

(a) You agree to satisfy, upon demand, any and all indebtedness to TradeStation Securities, and to pay any debit balance in your Account, no later than the deadline set by TradeStation Securities; such deadline may and shall be determined or modified by TradeStation Securities, subject only to limitations imposed by Applicable Laws, in TradeStation Securities' sole and absolute discretion.

(b) All of your property held by or under the control of TradeStation Securities is subject to a lien to secure the payment and performance of your indebtedness, liabilities and obligations (of any kind or nature) to TradeStation Securities, and you hereby grant to TradeStation Securities a lien on, and a valid and first priority, perfected, continuing security interest in, the following: (i) all property, including all investment property, held, carried or controlled by or through, or on our behalf by, TradeStation Securities in which you presently have or in which you acquire an interest in the future, including all property in each Account in your name, and (ii) any and all rights, claims or causes of action you may now or hereafter have against TradeStation Securities or its affiliates, employees or agents, and (iii) all other assets and property, tangible or intangible, fixed, contingent or mixed, of any kind or nature owned by you that are held, carried or controlled by or through, or on your behalf by, TradeStation Securities or any of its affiliates, or which TradeStation Securities or any of its affiliates has the power to access, possess or control, including but not limited to any assets in any equities account you have with TradeStation Securities and (iv) all proceeds of, or distributions on, any of the foregoing (collectively, (i) through (iv) are referred to in this Agreement as "Collateral").

(c) Any and all Collateral is held by TradeStation Securities as secured party, and as agent and bailee for TradeStation Securities, Inc. and any other entity that is part of TradeStation Securities. TradeStation Securities, holding Collateral, may, without your further consent, give, comply with and implement (i) entitlement orders or instructions with respect to the Collateral and (ii) any instructions to apply any value distributed on account of any Collateral. Additionally, TradeStation Securities, holding Collateral, has the right not to comply with (x) any entitlement order or instruction from you or a third party with respect to the Collateral and (y) any instruction from you to apply any value on account of any Collateral, if TradeStation Securities decides or instructs that such order or instruction not be complied with in order to maintain security for the payment and performance of your obligations and liabilities to it. You agree that the actions of TradeStation Securities in not complying with orders or instructions as allowed in the preceding sentence satisfy any duties it may have under

the Uniform Commercial Code of any state or jurisdiction (“UCC”), and you further agree that TradeStation Securities’ rights and remedies against you as debtor and in its favor as secured party are, and shall be, the broadest possible rights under the applicable UCC, and all notices and elections necessary to have those broadest possible rights are hereby deemed specifically given.

(d) You agree that this Agreement, and that you have acknowledged and accepted this Agreement, shall constitute notice of the security interest granted to TradeStation Securities to any and all persons and entities to whom giving notice is appropriate or required.

(e) The reasonable costs and expenses of collection of any of your indebtedness, obligations, liabilities or debit balances, including but not limited to attorneys’ fees and expenses, shall be payable by you to TradeStation Securities.

(f) In order more fully to secure the payment and performance of any of your outstanding liabilities and obligations to TradeStation Securities, it may, to the fullest extent permitted by Applicable Laws, without prior notice to you, use, apply or transfer Collateral as it determines. Unless otherwise agreed in writing, TradeStation Securities may register and hold Collateral in its name or the name of one or more designees. You authorize TradeStation Securities to instruct any of its affiliates holding Collateral to liquidate such Collateral and deliver the proceeds thereof to TradeStation Securities, and for TradeStation Securities to apply same against and to satisfy your obligations, indebtedness and liabilities to TradeStation Securities, in whole or in part, with or without notice to you, and you shall hold TradeStation Securities and any such affiliate harmless with respect to any such instruction, liquidation, delivery and application, and you consent that such affiliate has the right to engage in the foregoing actions no differently than if such affiliate was the creditor and secured party.

(g) You appoint TradeStation Securities with full power as your true and lawful attorney-in-fact, to the fullest extent permitted by law, for the purpose of perfecting the security interest granted in this Agreement and taking any action and executing any instrument that TradeStation Securities deems necessary or advisable to accomplish the purposes of this Agreement, including, but not limited to, the full exercise and enforcement by it of its rights as secured party hereunder.

(h) Notwithstanding anything to the contrary contained in this paragraph, or in this Agreement, and to clarify the purpose, meaning and intent of this paragraph and any other provisions relating to security interests in any of your assets, in no event are any assets in any ERISA plan account or IRA account you may have with TradeStation Securities collateral or security for any of your obligations to TradeStation Securities or any of its affiliates, and in no event are any assets of yours in any account you have with TradeStation Securities or any of its affiliates collateral or security for any of your obligations under any type of ERISA plan account or IRA account you may have with TradeStation Securities, and, in all such cases, no such security interest has ever been created.

22. No Physical Deliveries

TradeStation Securities will not accommodate customers entering into physical delivery or receipt of commodities underlying futures contracts. To avoid making or receiving deliveries of expiring futures

contracts as well as those resulting from commodity options/options on futures contracts, you must roll forward or close out positions prior to the applicable notice periods for physical delivery. TradeStation Securities without prior notification to you may, at its discretion, roll or liquidate your positions in order to avoid an impending physical delivery. You may incur significant losses and costs if a physical delivery takes place due to you holding a position into the delivery period, and solely you are responsible and otherwise liable for all such losses and costs, including any costs we incur.

23. Options on Futures

(a) YOU REPRESENT AND WARRANT THAT YOU WILL NOT PURCHASE A PUT OR CALL UNLESS YOU ARE ABLE TO SUSTAIN THE TOTAL LOSS OF THE PREMIUM AND RELATED TRANSACTION COSTS, AND THAT YOU WILL NOT SELL (WRITE) A CALL OR PUT OPTION UNLESS YOU EITHER OWN THE UNDERLYING FUTURES CONTRACT OR ARE ABLE TO WITHSTAND SUBSTANTIAL FINANCIAL LOSSES. You recognize that you are fully responsible for taking action to exercise an option contract. TradeStation Securities 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 you. You understand that exchanges have established exercise cut-off times for the tender of exercise instructions, and that your options may become worthless in the event that you do not provide instructions promptly. You further understand that TradeStation Securities' cut-off times may differ from the times established by the exchanges, and hereby agree to waive any and all claims for damage or loss which might arise out of an option not being exercised. TradeStation Securities will not be responsible for information regarding option expiration dates and assignment notification. Additionally, TradeStation Securities will not be responsible for any errors or omissions regarding such information.

(b) You understand that the TradeStation Securities exercise policy is random basis. All 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.

(c) You understand that particular commodity options may cease to trade at any time or expire, either of which event may result in your financial loss. You also understand that some exchanges may automatically exercise long in the money options pursuant to the regulations of such exchange. Also, see "Exercise and Assignment Policy for Futures Options" directly below.

Exercise and Assignment Policy for Futures Options

Exercise and assignment is the procedure by which an option position is converted into a futures position. The buyer of an option on a futures contract has the right (but not the obligation) to assume a specified futures position at a predetermined price (the exercise or strike price) at any time prior to the expiration of the option. The seller of the option must assume the opposite futures position if the buyer exercises this right.

There are four major differences between exercising an option on a futures position and making or taking delivery on a futures contract:

- (a) An option may be exercised on any business day between its sale and execution.
- (b) An option is exercised by the buyer's clearing member while a selling clearing member is randomly selected to satisfy the obligation of the option.
- (c) An option contract does not have to be exercised; it may be allowed to expire, or be liquidated (offset).
- (d) When an option is exercised, assignment of the short and long futures position is accomplished by the clearing house or corporation through a book entry into the futures clearing system. The clearing members of the buyer and the seller are assigned futures positions at the strike price, and are subject to immediate variation margin calls.

The commodity exchanges have various provisions for exercising in-the-money options at expiration date. Customers have an obligation to monitor in-the-money options as the expiration dates approach. TradeStation Securities will automatically exercise in-the-money options. TradeStation Securities has procedures for assuring exercise notices to customers on a first-in-first-out non-preferential basis when it receives a notice from the clearing house or corporation. When a customer who has a short position is assigned an exercise notice, the broker should attempt to notify such customer prior to trading the next business day. If the assigned futures positions results in an open futures position, as opposed to offsetting an existing futures position, the customer must promptly pay any additional margins required.

24. Free Credit Balances

You hereby authorize TradeStation Securities to use any free credit balance in your Account in accordance with all Applicable Laws and to pay interest thereon, if any, at such rate or rates and under such conditions as are established from time to time by TradeStation Securities for your Account and for the amounts of cash so used. Free credit balances are carried in customers' accounts pending, and with a view towards, reinvestment. TradeStation Securities may determine not to pay, and likely will not pay, customers interest on free credit balances. Notwithstanding any of the foregoing to the contrary, TradeStation Securities is under no obligation to pay you any interest or other compensation on any free credit balance in your Account.

25. Authority to Pledge Collateral

You represent, warrant and covenant that (a) you have the right to pledge and assign the Collateral to TradeStation Securities and (b) all Collateral is and shall at all times be free and clear of any liens, claims or encumbrances, except in favor of TradeStation Securities or its clearing firm (if any).

26. Deposits on Transactions

TradeStation Securities may require you to deposit cash or other property acceptable to TradeStation Securities as Collateral in your Account in such amounts as TradeStation Securities determines in its sole discretion, and you agree to comply with any such request by no later than the deadline set by TradeStation Securities.

27. Breach, Bankruptcy or Default

(a) TradeStation Securities may, in its sole and absolute discretion, elect to consider you in default of any or all agreements you may then have with TradeStation Securities (whether or not related to your Account), including this Agreement, if (i) you do not pay any liability or indebtedness or perform any obligation to TradeStation Securities by the time you are obligated to do so; (ii) you otherwise breach, repudiate or default under this Agreement or any other agreement you may have with TradeStation Securities or any of its affiliates or service providers; (iii) you commence a proceeding in bankruptcy or insolvency or one is commenced against you; (iv) any guarantor, cosigner or other party (a "**Responsible Party**") liable, or providing security for, any of your indebtedness, liabilities or obligations to TradeStation Securities or any of its affiliates or service providers defaults in an obligation or commences a proceeding in bankruptcy or insolvency or one is commenced against it; (v) an attachment is made against your or a Responsible Party's account(s) with TradeStation Securities; (vi) a receiver is appointed with respect to you, any of your assets or the assets of a Responsible Party; (vii) if you are a natural person, you die or become incompetent, or, if you are an entity, you merge, liquidate, sell a material portion of your assets (directly or indirectly) or dissolve; or (viii) an event, circumstance or condition occurs that, in TradeStation Securities' judgment (which shall be conclusive unless it is exercised totally arbitrarily or capriciously), materially impairs your creditworthiness, your ability to timely perform any of your obligations or otherwise causes TradeStation Securities to view itself (or any entity that is a part thereof) as insecure.

(b) Upon the election by TradeStation Securities to consider you in default, TradeStation Securities shall have all of the rights and remedies of a secured party upon default under the UCC and other Applicable Laws and may, without notice to you, among other things, foreclose, collect, sell or otherwise liquidate any Collateral TradeStation Securities selects in its sole discretion, in any order and at any time, and apply, in a manner determined by TradeStation Securities, in its sole discretion, the proceeds to satisfy any of your obligations or liabilities to TradeStation Securities or any of its affiliates. At any sale of Collateral or other sale or purchase permitted hereunder or otherwise, TradeStation Securities may sell or purchase to or from itself or third parties, and you hereby acknowledge and agree that any Contracts or securities subject to such sale or purchase are instruments traded in a recognized market. You will pay TradeStation Securities for any losses and costs incurred by TradeStation Securities as a result of any default by you. You waive marshaling of assets and any similar doctrine dealing with the application of collateral.

28. Collection and Other Account-Related Costs

You hereby agree to pay, on demand, all reasonable costs, fees, expenses, liabilities and damages incurred by TradeStation Securities, as the case may be ("**Costs**"), in connection with (a) enforcing its rights hereunder, or (b) any investigation, litigation or proceeding involving your Account or any property therein, or (c) the use or access by you, or any other person authorized to act on your behalf, of an EES or other Services, or (d) any breach or failure by you to perform any term or provision of this Agreement, any other agreement between you and TradeStation Securities or its affiliates or any agreement governing your use of or access to any EES, or (e) TradeStation Securities acting in reliance upon your instructions or the instructions of any person authorized to act on your behalf. In each case, and whether or not demand has been made therefor, you hereby authorize TradeStation Securities to charge your Account for any and all such Costs.

29. Disclosure of Status

You agree to promptly notify TradeStation Securities in writing (if you have not already done so) if you are now or if you become registered or qualified with: (a) the Financial Industry Regulatory Authority, the National Futures Association, the Securities and Exchange Commission, the CFTC, any state securities agency, any securities exchange or association, or any commodities or futures contract market or association; (b) engaged as an "investment advisor" as that term is defined in Section 201 of the Investment Advisors Act of 1940 (whether or not registered or qualified under that act); (c) a "commodity trading advisor" or "commodity pool operator" as those terms are defined Section 1a of the Commodity Exchange Act; or (d) employed by a bank or other organization exempt from registration under federal and state securities laws to perform functions that would require you to be so registered or qualified if you were to perform such functions for an organization not so exempt. Except as otherwise specifically set forth in your Account application, you represent and warrant that you are not any of the foregoing.

30. Waiver; Assignment

Neither TradeStation Securities' failure to insist at any time upon strict compliance with the terms of this Agreement, nor any continued course of such conduct on its part, shall constitute or be considered a waiver by TradeStation Securities of any of its rights or privileges hereunder. Except as specifically permitted in this Agreement, no provision or condition of this Agreement can be, or should be deemed to be, waived, altered, modified or amended unless specifically agreed to in writing by a duly authorized officer of TradeStation Securities (President, Vice President of Finance, General Counsel and Chief Compliance Officer are the only officers duly authorized for this purpose). TradeStation Securities' failure to enforce any provision or condition of this Agreement shall not be deemed a waiver of the requirements of said provision or condition or any other provision or condition. Any assignment of your rights and obligations hereunder or your interest in any property held by or through TradeStation Securities without obtaining the prior written consent of an authorized representative of TradeStation Securities shall be null and void. TradeStation Securities reserves the right to assign

any of its rights or delegate any of its obligations hereunder without prior notice to you, except as otherwise required by Applicable Laws.

31. Legally Binding

You hereby agree that the terms of this Agreement shall be binding upon you and your estate, heirs, executors, administrators, personal representatives, successors and assigns.

32. Amendment By TradeStation; Presumptive Receipt of Communications

Communications may be sent to you at your postal or electronic mail address or at such other address as you may hereafter specify in writing in any form. Modifications and amendments of or to this Agreement (including changes in Transaction Fees, Execution Fees and Service Fees) may be posted on the TradeStation company website and shall be effective as of the date posted. All communications so sent, whether by posting, mail, e-mail, telegraph, messenger or otherwise, shall be deemed received on the earliest date sent or published, whether or not actually received or reviewed. You acknowledge and agree that TradeStation Securities may, at any time, in its sole discretion, modify or amend the terms of this Agreement or your access to any EES or other Services provided by TradeStation Securities. Your continuing to accept or use any EES or other Services after said modification or amendment is published, posted or sent shall conclusively be deemed your express acceptance of all said modifications or amendments in exchange therefor. In addition to, and without in any way limiting the breadth or scope of any of the foregoing provisions, you acknowledge and agree that notices and other communications (including, without limitation, margin calls) delivered, faxed, sent by express delivery service, e-mailed or mailed to the address (and/or e-mail address) provided by you shall, until TradeStation Securities has received notice in writing of a different address, be deemed to have been personally delivered to you whether actually received or not. Notices and other communications may also be provided to you verbally. Such notices and other communications left for you on your answering machine, or otherwise, including, but not limited to, margin calls and other demands of immediate payment of indebtedness, debit balances, or other obligations, shall be deemed to have been delivered to you, whether actually received or not. None of the foregoing provisions is intended to suggest or imply that any notice is required to be given you as a condition to TradeStation Securities exercising or enforcing any of its rights or remedies under this Agreement, as a secured party or otherwise, and you understand and acknowledge TradeStation Securities may act without or before providing you with notice of any kind, in its sole and absolute discretion, to the fullest extent permitted and authorized by this Agreement, and the applicable UCC and other Applicable Laws. Notices and other communications from you to TradeStation Securities shall be in writing. You hereby authorize TradeStation Securities to accept facsimile, scanned or electronic copies of this or any other document or instruction as if it were the original, delivered in person, and to accept facsimile or electronic signatures or acknowledgments, or other electronic equivalents, as if they were originals delivered in person.

33. Ownership and Confidentiality

You acknowledge and agree that nothing in this Agreement or any other agreement with TradeStation Securities or any of its affiliates shall constitute the sale of any equipment, software, hardware, procedure or system utilized by any EES or other Services provided by or through TradeStation Securities or any of its affiliates (collectively, the “**Technology**”). You hereby agree to keep confidential and not disclose, copy, transfer, reverse engineer, or modify any Technology, whether or not said Technology is actually owned by TradeStation Securities, its affiliates or a third party. You expressly agree that, in connection with any dispute, the Technology and TradeStation Securities’ or its affiliates’ other trade secrets or confidential information shall be disclosed, if at all, only upon issuance of protective order(s) effectively limiting disclosure to maintain confidentiality.

34. Monitoring and Recording Conversations

All communications between you and TradeStation Securities and its affiliates by telephone, computer link, live chat or any other satellite, cable or telecommunications device or electronic or digital method may or will be monitored, recorded and archived by TradeStation Securities and may be used and shall be admissible in connection with any investigation, inquiry or dispute that may arise, or for any valid or legitimate business purpose that is not violative of TradeStation Securities’ **Privacy Notice** (which you acknowledge you have received and read). You voluntarily and knowingly acknowledge and irrevocably consent to all of such monitoring, recording and archiving of your communications with TradeStation Securities, its affiliates, and their respective agents and employees, and acknowledge and agree that no further notice or consent is necessary.

35. Power of Attorney

You hereby irrevocably appoint TradeStation Securities, with full power as your true and lawful attorney-in-fact, to the fullest extent permitted by Applicable Laws, for the purpose of carrying out the provisions of this Agreement and taking any action and executing any instrument that TradeStation Securities deems reasonably necessary or advisable to accomplish the purposes of this Agreement.

36. Independence

Nothing in this Agreement shall be construed as, or to create, a joint venture, agency, partnership or other similar relationship between the parties.

37. Choice of Law

All matters relating to the Services, your Account or this Agreement and any dispute or claim arising therefrom or related thereto (in each case, including, but not limited to, non-contractual disputes or claims), shall be governed by and construed and enforced in accordance with the internal laws of the State of Florida without giving effect to any choice or conflict of law provision or rule (whether of the State of Florida or any other jurisdiction). You agree that this Agreement has been executed and

delivered, and that the performance of the transactions contemplated by this Agreement will be, or will have been performed, in the State of Florida. Also, see the “Arbitration” section below.

38. 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 [meaning, by agreeing to the pre-dispute arbitration agreement described in this section], 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 TradeStation Securities may submit to arbitration under this Agreement. You are not, however, waiving your right to elect instead to petition the CFTC to institute reparations proceedings under Section 14 of the Commodity Exchange Act with respect to any dispute that may be arbitrated pursuant to this Agreement. In the event a dispute arises, you will be notified if TradeStation Securities 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 CFTC (a “CFTC Reparations Proceeding”), you will have 45 days from the date of such notice in which to make that election. You need not sign this agreement [agree to pre-dispute arbitration] to open or maintain an account with TradeStation Securities. See 17 CFR 166.5.

THE FOLLOWING ARBITRATION PROVISION IS OPTIONAL AND MAY BE ACCEPTED OR DECLINED BY INITIALING OR MARKING THE APPLICABLE BOX ON THE FUTURES ARBITRATION ELECTION ON THE ACCOUNT APPLICATION PAGE WHICH REFERS SPECIFICALLY TO THIS SECTION. PLEASE REVIEW THESE PROVISIONS CAREFULLY BEFORE MAKING YOUR ARBITRATION ELECTION. THIS SECTION WILL EXPLAIN WHAT WILL HAPPEN (1) IF YOU ELECT OR HAVE ELECTED TO BE BOUND BY THE PRE-DISPUTE ARBITRATION AGREEMENT AND (2) IF YOU HAVE ELECTED NOT TO BE BOUND BY THE PRE-DISPUTE ARBITRATION AGREEMENT.

(a) If you elect, or have elected, to be bound by the pre-dispute arbitration agreement (if you initialed or marked that box in the Account application agreeing to the pre-dispute arbitration agreement), the following shall apply:

(i) Any controversy, claim or dispute arising out of or relating to your Account, the Services or this Agreement, or under or relating to any right, obligation or provision in this Agreement, between you and TradeStation Securities (and/or any past or present officer, agent, alleged agent, employee or

associated person of TradeStation Securities), including any dispute regarding the scope and applicability of this section, shall be settled and otherwise determined by arbitration. Any award rendered by the arbitrators shall be final and binding on each and all of the parties thereto and their personal representatives and successors at law, and judgment may be entered in any court of competent jurisdiction.

(ii) You agree that no person, including you, shall bring a putative or certified class action to arbitration, or seek to enforce any pre-dispute arbitration agreement against any person who has initiated in court a putative class action or who is a member of a putative class, who has not opted out of the class with respect to any claims encompassed by the putative class action until: (A) the class certification is denied; or (B) the class is decertified; or (C) the person is excluded from the class by the court. Such forbearance to enforce an agreement to arbitrate shall not constitute a waiver of any rights under this Agreement except to the extent expressly stated herein.

(iii) Notwithstanding the provisions of subsection (i) above, either party may, at any time prior to the initial arbitration hearing pertaining to a dispute or controversy, seek by application to the U.S. District Court for the Southern District of Florida or the Circuit Court of the 17th Judicial Circuit In and For Broward County, Florida, any such temporary or provisional relief or remedy ("provisional remedy") provided for by the laws of the U.S. or the laws of the State of Florida as would be available in an action based upon such dispute or controversy in the absence of an agreement to arbitrate. The parties acknowledge and agree that it is their intention to have any such application for a provisional remedy decided by the court to which it is made and that such application shall not be referred to or settled by arbitration. No such application to either said court for a provisional remedy, or any act or conduct by either party in furtherance of or in opposition to such application, shall constitute a relinquishment or waiver of any right to have the underlying dispute or controversy with respect to which such application is made settled by arbitration in accordance with subsection (i) above. With respect to any application for a provisional remedy and any application for judgment on an arbitration award, each party irrevocably (A) submits to the jurisdiction of the U.S. District Court for the Southern District of Florida or the Circuit Court of the 17th Circuit In and For Broward County, Florida, and (B) waives (with respect to provisional remedy proceedings) any objection which it may have at any time to the laying of venue of any proceedings brought in either such court, waives (with respect to provisional remedy proceedings) any claims that such proceedings have been brought in an inconvenient forum and further waives the right to object, with respect to such proceedings, that such court does not have jurisdiction over such party.

(iv) Even though you have chosen to be bound by this pre-dispute arbitration agreement, you have the right, if you choose, to have the dispute heard and adjudicated in a CFTC Reparations Proceeding, subject to CFTC's jurisdiction over the subject matter of the dispute. In order to exercise that right, you must send us a notice, within 45 days following the date we have notified you that we intend or demand that the dispute be resolved by arbitration, electing to have a CFTC Reparations Proceeding hearing. If you do not timely make such election, or if you make such election but all or some aspects of your dispute cannot be covered in a CFTC Reparations Proceeding (under CFTC subject matter

jurisdiction rules), your dispute, or the aspects of your dispute that are not covered in a CFTC Reparations Proceeding, will be subject exclusively to arbitration as described in all of the other provisions of this subsection (a).

(v) If either you or we give the other notice of demand or intention to arbitrate (and the entire dispute is not to be resolved in a CFTC Reparations Proceeding, as explained in subsection (iv) above), the following procedures will then apply: (A) within 10 business days of such notification (whether it is made by you or us), we will provide you with a choice of three qualified arbitration forums; and (B) one of those qualified forums will be the contract market (e.g., exchange) on which the disputed transaction was executed or could have been executed (the “**Contract Market Forum**”), one of those qualified forums will be the National Futures Association, and one of those qualified forums will be an arbitration organization, which we will name at that time, that will provide you with the opportunity to select the location of the arbitration proceeding from among several major cities in diverse geographic regions in the continental United States and that will provide you with the choice of a panel or other decision-maker composed of at least one or more persons, of which at least a majority are not members or associated with a member of the Contract Market Forum, if applicable, or employee thereof, and that are not otherwise associated with the Contract Market Forum (mixed panel), if applicable, and whose procedures meet “Acceptable Practices” established by the CFTC for dispute resolution. We shall also, at that time, provide you with a copy of the rules of each arbitration forum listed. You must select one of these three arbitration forums from the list we provide within 45 days following the date we provide it to you, and if you do not timely make such choice, then it becomes our right to select the arbitration forum from that list. We will pay any incremental fees that may be assessed by the arbitration forum for provision of a mixed panel, if applicable, unless the arbitrators in the proceeding determine that you have acted in bad faith in initiating or conducting the proceeding.

(vi) Notification of your intent to arbitrate must be sent by certified mail to TradeStation Securities, to the attention of President and General Counsel, at its headquarters in Florida.

(b) If you have not elected to be bound by the pre-dispute arbitration agreement (if you initialed or marked the box in the Account application that rejected the pre-dispute arbitration agreement), the following shall apply:

(i) You will, at the time a dispute arises, have two choices: (A) a civil court litigation in a court of competent subject matter jurisdiction, subject to the additional requirements explained below in subsection (iii); or (B) a CFTC Reparations Proceeding, subject to CFTC’s jurisdiction over the subject matter of the dispute. Notwithstanding the foregoing two choices, you and we may at that time mutually agree to resolve the dispute through arbitration using a forum and location as to which we mutually agree, but if we do not mutually agree (each in our sole discretion), then the only choices are (A) and (B) above in this clause (i).

(ii) If you choose the CFTC Reparations Proceeding, and it turns out that no part of the dispute, or not all aspects of the dispute, can be covered in a CFTC Reparations Proceeding, the dispute, or the aspects of the dispute that are not covered in a CFTC Reparations Proceeding, must be resolved by

civil litigation in a court of competent subject matter jurisdiction, subject to the additional requirements explained in subsection (iii) directly below, unless you and we at that time mutually agree to resolve the dispute through arbitration using a forum and location as to which we mutually agree (which neither you nor we are required to do).

(iii) WE BOTH AGREE THAT ANY DISPUTE BETWEEN US THAT IS TO BE RESOLVED BY CIVIL LITIGATION MUST BE RESOLVED BY EITHER THE U.S. DISTRICT COURT FOR THE SOUTHERN DISTRICT OF FLORIDA, OR THE CIRCUIT COURT OF THE 17TH JUDICIAL CIRCUIT IN AND FOR BROWARD COUNTY, FLORIDA, AND WE BOTH IRREVOCABLY CONSENT TO THE PERSONAL JURISDICTION OF SUCH COURTS AND REPRESENT TO EACH OTHER THAT BOTH BROWARD COUNTY AND MIAMI-DADE COUNTY, FLORIDA ARE NOT INCONVENIENT FORUMS OR VENUES. WE FURTHER REPRESENT TO ONE ANOTHER THAT WE DEEM BOTH THE EXECUTION AND DELIVERY OF THE AGREEMENT, AND THE PERFORMANCE OF THE AGREEMENT, INCLUDING THE TRANSACTIONS CONTEMPLATED TO BE PERFORMED IN YOUR ACCOUNT AND THE SERVICES, TO HAVE OCCURRED AND OCCUR IN THE STATE OF FLORIDA.

Notwithstanding any of the foregoing to the contrary contained in this entire section, if you are an **Eligible Contract Participant** (as defined in The Commodity Exchange Act), you agree that (1) clauses (a)(i), (ii) and (iii) above shall in all circumstances apply (mandatory arbitration in accordance with those provisions), and that you have no right to make any of the elections or choices described above, (2) the forum of the arbitration shall be, as chosen by TradeStation Securities, in its sole discretion, either the National Futures Association or the Contract Market Forum, and (3) venue for any such arbitration proceeding shall be proper only in Miami-Dade County, Florida or Broward County, Florida.

The provisions of this Arbitration section apply solely to your Account (which relates solely to Contracts and Services related to Contracts) and the rights and obligations of the parties under this Agreement, and do not apply to an equities account you may have with TradeStation Securities, or the agreements governing any such equities account (see **"Equities Accounts"** directly below for further explanation), or to any other account of any kind you may have with any affiliate of TradeStation Securities, or the agreements governing any such other account.

39. Estate Issues

You agree that, in the event of your death, the survivor(s) or the estate shall immediately give TradeStation Securities written notice of your death, and TradeStation Securities may, before or after receiving such notice, take such actions, require such papers, inheritance or estate tax waivers or federal transfer certificates, retain such portion of the Account and restrict financial transactions, transfers and withdrawals in the Account as required by law, TradeStation Securities' policies or as TradeStation Securities deems advisable to protect TradeStation Securities against any tax, liability, penalty or loss under any present or future laws or otherwise. Your estate and the Account shall be jointly liable for all costs (including reasonable attorneys' fees and costs) TradeStation Securities may incur in connection with the disposition of the Account and related assets and liabilities in the event of your death, disability or dissolution.

40. Equities Accounts

If you have opened an account to trade equities, including equity and/or index options, with TradeStation Securities (an “**Equities Account**”), you acknowledge and agree that your Equities Account is separate from your Account and is not covered by this Agreement (other than as Collateral), but rather solely by your TradeStation Securities, Inc. Customer Account Agreement for Equities, and the agreements, disclosures and other documents supplemental to that agreement, and the rights, obligations, remedies and defenses set forth therein (the “**TSS Equities Account Agreement**”), which you confirm you agreed to and accepted before or at the time your Equities Account was approved and opened. Without limiting the breadth of the foregoing acknowledgment and agreement by you, you understand and agree that the *pre-dispute arbitration agreement and other dispute resolution provisions of this Agreement* cover disputes relating only to your Account (under this Agreement), and do not cover disputes in any way relating to your Equities Accounts or the TSS Equities Account Agreement, whatever the basis or nature of such disputes, which are covered solely by the *pre-dispute arbitration agreement and other dispute resolution provisions of the TSS Equities Account Agreement*. You understand and accept that the arbitration forum requirements and choices (if any), and related procedures and mechanisms, as well as regulatory jurisdiction and rules of arbitration that apply, are significantly *different* in this Agreement (for Account disputes) compared to what they are in the TSS Equities Account Agreement (for Equities Account disputes). You represent, acknowledge and agree that you will not initiate any arbitration for any dispute (or component or aspect of any dispute) that in any manner relates to an Equities Account under any provision of this Agreement (including but not limited the *pre-dispute arbitration or other dispute-resolution provisions of this Agreement*), and that you are estopped from asserting that any provision of this Agreement, including its *pre-dispute arbitration agreement and other dispute-resolution provisions*, should be applied to or govern any part or aspect of any dispute which relates to an Equities Account. Similarly, you represent, acknowledge and agree that you will not initiate any arbitration for any dispute (or component or aspect of any dispute) that in any manner relates to your Account under any provision of the TSS Equities Account Agreement (including but not limited the *pre-dispute arbitration or other dispute-resolution provisions of the TSS Equities Account Agreement*), and that you are estopped from asserting that any provision of the TSS Equities Agreement, including its *pre-dispute arbitration agreement or other dispute-resolution provisions*, should be applied to or govern any part of any dispute which relates to your Account. You are making these representations, acknowledgements and agreements with the full understanding that if a dispute arises between you and TradeStation Securities that you believe relates to both your Account and your Equities Account to any extent or degree, such dispute will, unless you and TradeStation Securities at that time otherwise agree, likely be adjudicated in two separate dispute-resolution proceedings in two separate forums, and possibly two separate venues, under two separate sets of arbitration rules and procedures.

41. Severability

If any term, provision or condition of this Agreement shall be held to be invalid or unenforceable by reason of any law, rule, administrative order or decision by any court, or regulatory or self-regulatory agency or body, or in arbitration, said term, provision or condition shall be deemed modified only to such extent as is necessary to correct the invalidity or unenforceability and shall not affect the validity and enforceability of this Agreement or any other term, provision or condition of this Agreement, and the intent of this Agreement and that term, provision or condition shall be honored to the fullest possible extent in the circumstances.

42. Headings

The heading of each section or paragraph is for descriptive purposes only and shall not be deemed to modify or qualify any of the rights or obligations set forth in such section or paragraph.

43. Trademarks

TradeStation®, EasyLanguage®, RadarScreen®, OptionStation®, ActivityBar®, Portfolio Maestro®, PositionGraphs®, ProbabilityMap® Test Before You Trade® and TradingApp® are registered trademarks, and ShowMe and PaintBar are unregistered trademarks, of TradeStation Technologies, Inc., an affiliate of TradeStation Securities, and are used by TradeStation Securities pursuant to a trademark license. You have no right to use any of such trademarks in any context without the express prior written consent of the owner of such trademarks.

44. Consent to Identification Procedures, Credit Reports and Other Information

You voluntarily and knowingly consent to the following: TradeStation Securities may use your name, address, social security number, date of birth, home telephone number and/or other biographical or personal information about you (collectively, "Personal Information") to comply with applicable federal, state, local, quasi-governmental, self-regulatory and other laws, rules, regulations, recommendations, interpretations, authorizations, licenses and registrations, and other Applicable Laws, or for any valid or legitimate business purpose. The purposes for the use of Personal Information include, but are not necessarily limited to, verification of your identity and other factual information you present to us, verification that you are not listed as a specially designated national or blocked national by the Department of Treasury's Office of Foreign Asset Control (OFAC), and to investigate or verify your creditworthiness, business history and your history with legal and administrative authorities. Whatever procedures are used by TradeStation Securities shall not be violative of the terms of its **Privacy Notice**, which you acknowledge you have read. You authorize TradeStation Securities, in its sole discretion, to make or obtain reports concerning your credit standing, business conduct and history with legal, regulatory and administrative authorities. You may make a written request for a description of the nature and scope of the credit reports made or obtained by TradeStation Securities and the same will be provided to you within a reasonable period of time. You further agree to provide TradeStation Securities, on request, with such additional information or certifications as may be required by TradeStation Securities or Applicable Laws.

45. Cumulative Rights

The rights, remedies, benefits and privileges of TradeStation Securities under (a) this Agreement, (b) any other written agreement or document executed or delivered by you, and (c) any written agreement with an affiliate of TradeStation Securities (collectively, the **“Related Agreements”**), whether part of this Agreement or otherwise, are cumulative and shall be interpreted to convey to and upon TradeStation Securities and its affiliates the broadest, most expansive, most enforceable rights, remedies, benefits, defenses and privileges. Any inconsistencies or conflicts between or among any of the Related Agreements shall be disregarded, as TradeStation Securities may at any time, or from time to time, choose, so that TradeStation Securities may enjoy to the fullest extent possible the right, remedy, benefit, defense or privilege that it, at any time or from time to time, seeks to assert, enforce or avail to itself.

46. TradeStation Technologies, Inc. Subscription Agreement

(a) You acknowledge that you have received and accepted, in connection with your Account application, a subscription agreement (**“TST Subscription Agreement”**) with our affiliate, TradeStation Technologies, Inc., (**“TST”**), for a subscription (**“TST Subscription”**) for Software and Data (as those terms are defined in the TST Subscription Agreement).

(b) We are authorized to offer to you the TST Subscription and the TST Subscription Agreement with your Account application, and permit you use the Software and Data in connection with your Account in accordance with the terms and conditions of the TST Subscription Agreement as it relates to the Software and Data, and this Agreement as it relates to your Account and the Services, including EES.

(c) You authorize TradeStation Securities to debit your Account the full amount of any fees owed for your permission to use the TST Subscription in connection with your Account. Any such fees are for permitted access to the Software and the Data as connected to your Account, and those fees do not change, and are not reduced or prorated, based on your actual login to, or use of, the Software or the Data, or your Account, even if you rarely or never use them. TradeStation Securities may decide not to charge you any fee amounts for use of your TST Subscription in connection with your Account, but may charge your Account fees which relate to your level of Account transaction activity in a month, quarter or year, or the size of your Account balances, and any such type of fee or charge is, regardless of what it is called or referred to as, an inactivity or low-activity fee being charged to you by TradeStation Securities incidental to the Services, and not a fee or charge for the TST Subscription, or the Software or the Data.

(d) You acknowledge and agree that TradeStation Securities is an intended and express third-party beneficiary of the TST Subscription Agreement, and may enforce and assert against you all of the rights, remedies, benefits, defenses and counterclaims of TST thereunder to the same extent and degree as TST may or could so do (except only to the extent prohibited by Applicable Laws), and we, in any arbitration or other dispute-resolution proceeding with you, or anyone acting by or through you, may assert against you any or all of the disclaimers, assumptions of risk, limitations of liability and other

provisions of the TST Subscription Agreement, as rights, remedies, benefits, defenses and counterclaims against you, no differently than had you made them directly to TradeStation Securities in this Agreement. You acknowledge and agree that neither the express beneficiary designation of TradeStation Securities under the TST Subscription Agreement, nor any other provision of the TST Subscription Agreement, creates in your favor any express or implied right or remedy, of any kind or nature, against TradeStation Securities under the TST Subscription Agreement or this Agreement.

(e) You further acknowledge and agree that your TST Subscription is separate from your Account and is not covered by this Agreement, but rather solely by your TST Subscription Agreement, and, as stated above, TradeStation Securities being a third-party beneficiary under the TST Subscription Agreement creates no rights of any kind or nature for you against TradeStation Securities under the TST Subscription Agreement or this Agreement. Without limiting the breadth of the foregoing acknowledgment and agreement by you, you understand and agree that the ***pre-dispute arbitration agreement and other dispute resolution provisions of this Agreement*** cover disputes relating only to your Account and the Services (under this Agreement), and do not cover disputes in any way relating to your TST Subscription, the Software or the Data or the TST Subscription Agreement (and that TST has not consented to arbitration jurisdiction of any CFTC, NFA, Contract Market Forum or any similar regulatory agency or industry forum), whatever the basis or nature of such disputes, which are covered solely by the ***dispute resolution provisions of the TST Subscription Agreement***, and that you are estopped from asserting that any provision of this Agreement, including its ***pre-dispute arbitration agreement and other dispute-resolution provisions***, should be applied to or govern any part or aspect of any dispute which relates to your TST Subscription, the Software, the Data or the TST Subscription Agreement. You are making these acknowledgements and agreements with the full understanding that if a dispute arises between you and TradeStation Securities and/or TST that you believe relates to both your Account and your TST Subscription to any extent or degree, such dispute will, unless you, TradeStation Securities and TST at that time otherwise agree, likely be adjudicated in two separate dispute-resolution proceedings in two separate forums, and possibly two separate venues, under two separate sets of rules and procedures.

47. For Account Owners Under Age 21 or Over Age 65, or Who Have Annual Income under \$50,000 or Net Worth under \$50,000, or Have Fewer than Six Months Futures Trading Experience

TradeStation Securities is providing you with this additional risk disclosure before you open a Futures trading account if one or more of the following apply to you:

- *Your annual income is less than \$50,000;*
- *Your net worth is less than \$25,000;*
- *You are under age 21;*
- *You are over age 65*
- *You do not have at least six months of futures trading experience.*

While TradeStation Securities may agree to open your Account, we first advise you to consider the risks involved with futures trading. The risk of loss in futures trading can be substantial and may be inappropriate if you are in any of the categories referenced above; therefore, you must consider whether such trading is proper in light of age, experience and/or financial condition. Only risk capital (money that you are able to lose without adversely affecting your standard of living) should be invested. TradeStation Securities recommends that you review again all of the risk disclosure statements included in this Agreement and that you acknowledged in the application process for your Account, and then discuss any concerns you may have with your financial advisor(s) before finalizing your decision. Also, please be aware that TradeStation Securities' margin policies may require that additional funds be provided to properly meet margin requirements in your Account, and that your failure to maintain the minimum margin requirement may result in the liquidation of any open positions with resultant loss of your cash and other Account assets, and losses which greatly exceed those amounts. You acknowledge and accept that you are proceeding with your Account even though the risks associated with futures trading are often not appropriate for people in your situation. However, you represent and warrant that you have read this Agreement and all related risk disclosures presented to you, have considered the financial risks involved in futures trading with regard to your age, experience and/or financial condition, and you believe futures trading is appropriate to your situation and wish to open, use and maintain the Account.

48. Trading and Order Routing Disclosure Statement for Futures Trades

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

Differences Among Electronic Trading Systems

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

Risks Associated with System Failure

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

Simultaneous Open Outcry Pit and Electronic Trading

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

Limitation of Liability

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

*Each exchange's relevant rules are available upon request from TradeStation Securities. Some exchanges' relevant rules also are available on those exchanges' internet home pages or other website pages.