



APEX Options Agreement

In connection with any transactions in options which have been or may be purchased, sold, exercised or endorsed for the undersigned's account with an introducing broker(s) which clears through Apex Clearing Corporation, the undersigned agrees as follows:

1. Definitions.

"Introducing broker" means any brokerage firm which introduces security transactions on behalf of the undersigned, which transactions are cleared through Apex, whether one or more. "Obligations" means all indebtedness, debit balances, liabilities or other obligations of any kind of the undersigned to Apex, whether now existing or hereafter arising.

"Options" means all types of options, including puts, calls, equity, debt, index or otherwise. "Securities and other property" shall include, but shall not be limited to money, securities, commodities or other property of every kind and nature and all contracts and options relating thereto, whether for present or future delivery. "Apex" refers to Apex Clearing Corporation.

2. Limits.

The undersigned shall not, acting alone or in concert with others, exceed the position/exercise limits set forth by any exchange or market or by any other regulatory authority having jurisdiction.

3. Authority, Execution of Orders, Security Interest.

The undersigned hereby authorizes Apex in its discretion, should Apex deem it necessary for Apex's protection for any reason, including death of the undersigned, to buy, sell, or sell short for the undersigned's account any risk, puts, calls or other forms of option and/or to buy, sell or sell short any part or all of the underlying shares represented by options endorsed by Apex for the undersigned's account. Any and all expenses incurred by Apex in connection with such transactions shall be reimbursed by the undersigned to Apex. The undersigned understands and acknowledges that when transactions on the undersigned's behalf are to be executed and the options are traded in more than one marketplace Apex may use its discretion in selecting the market in which to enter the undersigned's order unless the undersigned specifically instructs otherwise. All monies, securities, or other property which Apex may hold in any account of the undersigned shall be held subject to a general lien for the discharge of the undersigned's obligations to Apex under this Agreement or otherwise. The decision to enter into options transactions was made entirely by the undersigned without any investment advice from Apex or the introducing broker.

4. Notice, Exercise, Random Allocation.

The undersigned is aware of Apex's requirements and time limitations for accepting an exercise notice and expiration date. The undersigned understands that the undersigned may not receive actual notice of exercise until the week following exercise. The undersigned bears full responsibility for taking action to exercise or sell valuable options; however, in the absence of the undersigned notifying the introducing broker to exercise a valuable options contract by 3 p.m. Central Standard Time on the last business day prior to the expiration date of the options contract, and the introducing broker instructing Apex to sell valuable options on the undersigned's behalf within such time, the undersigned agrees that Apex may exercise the options contract on the undersigned's behalf. In the event of such exercise, the profit in excess of commission costs created thereby will be credited to the undersigned's account. In the event that the commissions to be charged for such an expiration transaction exceeds the proceeds to be realized, the undersigned agrees and hereby relinquishes the undersigned's ownership in said option to Apex, and Apex may exercise such option for its own account. If the undersigned does not instruct the introducing broker to exercise the valuable option by the time stated above, and Apex for whatever reason, does not exercise such option on the undersigned's behalf, the undersigned hereby waives any and all claims for damage or loss which the undersigned might at the time or any time thereafter have against Apex arising out of the fact that the option was not exercised. The undersigned is aware that Apex utilizes a random method of allocation for all option(s) assignments received from the Option Clearing Corporation. Exercise assignment notices for options contracts are allocated among all customers' short positions within that series. This is accomplished by a manual procedure, which randomly selects from among all customer short positions, including positions established on the day of assignment, those contracts which are subject to exercise. All American short positions are liable for assignment at any time. The undersigned understands that a more detailed description of this procedure is available upon request by the undersigned.

5. Uncovered Options.

The undersigned agrees that in connection with any uncovered options(s) for the undersigned's account, uncovered options are prohibited in IRA accounts. The undersigned agrees not to sell, during the life of the options in the account, the underlying securities collateralizing such options, including any cash or securities which may accrue on the underlying covered securities until such options are closed, exercised or expired or the undersigned has met the collateral requirements established by Apex and/or the introducing broker for carrying uncovered options. The undersigned also agrees that the introducing broker and/or Apex, in its respective sole discretion, may refuse any order to sell such underlying securities received from the undersigned or by means of a "give up" basis through another firm unless, prior to such sale, the undersigned has met the collateral requirements established by Apex and/or the introducing broker for carrying uncovered options. Apex has the right, in its sole discretion, to permit the undersigned to apply the proceeds of such sale to such collateral requirements.

6. Risks. The undersigned is aware of the high degree of risk involved in options transactions and has given the introducing broker, in strict confidence, information to demonstrate that this account and the trading anticipated in connection therewith is not unsuitable for the undersigned in light of the undersigned's investment objectives, financial situation and needs, experience and knowledge. The undersigned agrees to advise the introducing broker of any changes in the undersigned's investment objectives, financial situation or other circumstances that may be deemed to materially affect the suitability of executing options transactions for the undersigned's account.

7. Options Account Form, Disclosure Documents. The undersigned has reviewed the contents of the options account form and represents that they are accurate. Although certain types of transactions are indicated as anticipated, Apex and the introducing broker may execute any other types of transactions for the undersigned's account upon the undersigned's instructions. The undersigned has received an Options Disclosure Document relating to options on the categories of underlying securities which the undersigned has been approved for trading.

8. Accounts Carried as Clearing Broker.

The undersigned understands that Apex is carrying the accounts of the undersigned as clearing broker by arrangement with the undersigned's introducing broker through whose courtesy the account of the undersigned has been introduced to Apex. Until receipt from the undersigned of written notice to the contrary, Apex may accept and rely upon the introducing broker for (a) orders for the purchase or sale in said account of securities and other property, and (b) any other instructions concerning the undersigned's accounts. The undersigned represents that the undersigned understands that Apex acts only to clear trades introduced by the undersigned's introducing broker and to effect other back office functions for the undersigned's introducing broker. The undersigned confirms to Apex that the undersigned is relying for any advice concerning the undersigned's accounts solely on the undersigned's introducing broker. The undersigned understands that all representatives, employees and other agents with whom the undersigned communicates concerning the undersigned's account are agents of the introducing broker, and not Apex's representatives, employees or other agents. The undersigned understands that Apex will not review the undersigned's accounts and will have no responsibility for trades made in the undersigned's accounts, including but not limited to for appropriateness or suitability. Apex shall not be responsible or liable for any acts or omissions of the introducing broker or its representatives, employees or other agents. The execution of any such trades shall not be deemed to be an approval of such trades.

9. ARBITRATION AGREEMENT.

THIS AGREEMENT CONTAINS A PREDISPUTE ARBITRATION CLAUSE. BY SIGNING AN ARBITRATION AGREEMENT THE PARTIES AGREE AS FOLLOWS: a. ALL PARTIES TO THIS AGREEMENT ARE GIVING UP THE RIGHT TO SUE EACH OTHER IN COURT, INCLUDING THE RIGHT TO A TRIAL BY JURY, EXCEPT AS PROVIDED BY THE RULES OF THE ARBITRATION FORM IN WHICH A CLAIM IS FILED; b. ARBITRATION AWARDS ARE GENERALLY FINAL AND BINDING; A PARTY'S ABILITY TO HAVE A COURT REVERSE OR MODIFY AN ARBITRATION AWARD IS VERY LIMITED. c. THE ABILITY OF

THE PARTIES TO OBTAIN DOCUMENTS, WITNESS STATEMENTS AND OTHER DISCOVERY IS GENERALLY MORE LIMITED IN ARBITRATION THAN IN COURT PROCEEDINGS; d. THE ARBITRATORS DO NOT HAVE TO EXPLAIN THE REASON(S) FOR THEIR AWARD UNLESS, IN AN ELIGIBLE CASE, A JOINT REQUEST FOR AN EXPLAINED DECISION HAS BEEN SUBMITTED BY ALL PARTIES TO THE PANEL AT LEAST 20 DAYS PRIOR TO THE FIRST SCHEDULED HEARING DATE. e. THE PANEL OF ARBITRATORS MAY INCLUDE A MINORITY OF ARBITRATORS WHO WERE OR ARE AFFILIATED WITH THE SECURITIES INDUSTRY. f. THE RULES OF SOME ARBITRATION FORUMS MAY IMPOSE TIME LIMITS FOR BRINGING A CLAIM IN ARBITRATION. IN SOME CASES, A CLAIM THAT IS INELIGIBLE FOR ARBITRATION MAY BE BROUGHT IN COURT. g. THE RULES OF THE ARBITRATION FORUM IN WHICH THE CLAIM IS FILED, AND ANY AMENDMENTS THERETO, SHALL BE INCORPORATED INTO THIS AGREEMENT. THE FOLLOWING ARBITRATION AGREEMENT SHOULD BE READ IN CONJUNCTION WITH THE DISCLOSURES ABOVE. ANY AND ALL CONTROVERSIES, DISPUTES OR CLAIMS BETWEEN THE CUSTOMER AND YOU, OR THE INTRODUCING BROKER, OR THE AGENTS, REPRESENTATIVES, EMPLOYEES, DIRECTORS, OFFICERS OR CONTROL PERSONS OF YOU OR THE INTRODUCING BROKER, ARISING OUT OF, IN CONNECTION WITH, FROM OR WITH RESPECT TO (a) ANY PROVISIONS OF OR THE VALIDITY OF THIS AGREEMENT OR ANY RELATED AGREEMENTS, (b) THE RELATIONSHIP OF THE PARTIES HERETO, OR (c) ANY CONTROVERSY ARISING OUT OF YOUR BUSINESS, THE INTRODUCING BROKER'S BUSINESS OR THE CUSTOMER'S ACCOUNTS, SHALL BE CONDUCTED PURSUANT TO THE CODE OF ARBITRATION PROCEDURE OF THE FINANCIAL INDUSTRY REGULATORY AUTHORITY ("FINRA"). THE DECISION AND AWARD OF THE ARBITRATOR(S) SHALL BE CONCLUSIVE AND BINDING UPON ALL PARTIES, AND ANY JUDGMENT UPON ANY AWARD RENDERED MAY BE ENTERED IN A COURT HAVING JURISDICTION THEREOF, AND NEITHER PARTY SHALL OPPOSE SUCH ENTRY. No person shall bring a putative or certified class action to arbitration, nor 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: (i) the class certification is denied; or (ii) the class is decertified; or (iii) the customer 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 stated herein.

10. Other Agreements.

The undersigned agrees to be bounded by the terms of Apex's Retirement Custodial Account Agreement, Apex's Customer Account Agreement and/or Apex's Customer Margin and Short Account Agreement. The undersigned understands that copies of this agreement are available from Apex and, to the extent applicable, are incorporated by reference herein. The terms of this other agreement is in addition to the provisions of this Agreement and any other written agreements between Apex and the undersigned.

11. Data Not Guaranteed.

The undersigned expressly agrees that any data or online reports is provided to the undersigned without warranties of any kind, express or implied, including but not limited to, the implied warranties of merchantability, fitness of a particular purpose or non-infringement. The undersigned acknowledges that the information contained in any reports provided by Apex are obtained from sources believed to be reliable but is not guaranteed as to its accuracy of completeness. Such information could include technical or other inaccuracies, errors or omissions. In no event

shall Apex or any of Apex's affiliates be liable to the undersigned or any third party for the accuracy, timeliness, or completeness of any information made available to the undersigned or for any decision made or taken by the undersigned in reliance upon such information. In no event shall Apex or Apex's affiliated entities be liable for any special incidental, indirect or consequential damages whatsoever, including, without limitation, those resulting from loss of use, data or profits, whether or not advised of the possibility of damages, and on any theory of liability, arising out of or in connection with the use of any reports provided by Apex or with the delay or inability to use such reports.

12. Credit Check.

Apex is authorized, in Apex's discretion, should Apex for any reason deem it necessary for Apex's protection to request and obtain a consumer credit report for the undersigned.

13. Miscellaneous.

The undersigned is aware of and agrees that this Agreement and all transactions in the undersigned's accounts shall be governed by the constitution, rules, regulations, customs, usages and bylaws of the Options Clearing Corporation and the Financial Industry Regulatory Authority, and all exchanges or other facilities upon which options are traded for the account of the undersigned. If any provisions of this Agreement are held to be unenforceable, it shall not affect any other provisions of this Agreement. The headings of each sections of this Agreement are descriptive only and do not modify or qualify any provision of this Agreement. This Agreement and its enforcement shall be governed by the law of the state of Texas and shall cover individually and collectively all accounts which the undersigned has previously opened, now has open or may open or reopen with Apex, or any introducing broker, and any and all previous, current and future transactions in such accounts. Except as provided in this Agreement, no provision of this Agreement may be altered, modified or amended unless executed in writing by Apex's authorized representative. This Agreement and all provisions shall insure to the benefit of Apex and Apex's successors, whether by merger, consolidation or otherwise, Apex's assigns, the undersigned's introducing broker, and all other persons specified in Paragraph 9. Apex shall not be liable for losses caused directly or indirectly by any events beyond Apex's reasonable control, including without limitation, government restrictions, exchange or market rulings, and suspension of trading or unusually heavy trading in securities, a general change in economic, political or financial conditions, war or strikes. Apex may transfer the accounts of the undersigned to Apex's successors and assigns. This Agreement shall be binding upon the heirs, executors, administrators, successors and assigns of the undersigned.

SUPPLEMENTAL PROVISIONS

A. Pledging.

The undersigned understands that under Section 408(e)(4) of the Internal Revenue Code of 1986, as amended, if the undersigned pledges any portion of the undersigned's IRA as collateral for a loan, the amount so pledged will be treated as a distribution, and may be included in the undersigned's gross income for the taxable year in which the undersigned

pledges the assets to the extent it represents earnings or be subject to excise taxes.

B. Prohibited Transactions.

The undersigned understands that the extension of credit through margin, short selling positions, and uncovered options are not permitted in IRA accounts. If the undersigned or the undersigned's beneficiary engage in a prohibited transaction with the undersigned's IRA, as described in Section 4975 of the Internal Revenue Code of 1986, as amended, the undersigned's IRA may lose its tax-deferred or tax-exempt status, and the undersigned must generally include the value of the earnings in the undersigned account in gross income for the taxable year the undersigned engages in the prohibited transactions.

C. ERISA.

The undersigned hereby represents, warrants, and covenants that the undersigned's IRA is not subject to the Employee Retirement Income Security Act of 1974, as amended, and the undersigned will not engage in any transaction in the undersigned's IRA that involves any extension of credit by Apex.

D. No Advice.

The undersigned has been provided with an opportunity to consult with the undersigned's tax adviser regarding the advisability of holding options or conducting options strategies in the undersigned's IRA account. The undersigned has not and will not, rely on Apex for legal or tax advice in connection with engaging in options transactions in the undersigned's IRA. The undersigned will not hold Apex responsible for any adverse tax consequences or penalties that the undersigned or the undersigned's IRA may incur in connection with options transactions.

E. Obligations.

The undersigned understands that the undersigned is solely responsible for ensuring that sufficient assets are maintained in the undersigned's IRA to cover all potential obligations arising from the holding of options and conducting any options strategies, including any potential assignment and exercise. The undersigned acknowledges responsibility for not conducting options transactions that can result in liabilities or obligations in excess of the undersigned's IRA account balance. Apex shall not be responsible for the dishonor of any transaction due to an insufficient balance in the undersigned IRA. If an assignment creates a short position or debit balance, Apex is authorized to immediately cover deficit in the undersigned's IRA with other assets in the undersigned IRA account.

F. Indemnification.

By signing this Agreement, the undersigned hereby agrees to indemnify and hold Apex, Apex's affiliates, and their respective officers, directors, employees and agents, and their respective successors and assigns, harmless from and against any and all losses (including but not limited to consequential damages), liabilities, tax consequences (including excise taxes, penalties and interest), demands, claims and expenses, attorneys' fees, damages (including consequential, incidental, special or exemplary) arising out of any actions or omissions by Apex, or Apex's

agents in connection herewith, which are not caused by Apex's gross negligence or willful misconduct. This provision shall survive the termination of this Agreement and shall be binding upon, and inure to the benefit of, each party's respective successors, assigns, heirs, and personal representatives.

G. Option Levels

Level 1 Covered calls, including: Covered calls sold against stocks held long in your brokerage account Buy-writes (simultaneously buying a stock and writing a covered call) Covered call roll-ups/roll-downs.

Level 2 All Level 1 strategies, plus: Married puts, Long calls, Long puts, Long straddles, Long strangles, Covered puts (short stock and short put position)

Level 3 All Levels 1 and 2 strategies, plus: Equity debit spreads, Equity credit spreads, Equity calendar/diagonal spreads, Index debit spreads, Index credit spreads, Index calendar/diagonal spreads.

Level 4 All Level 1, 2, and 3 strategies, plus: Naked equity puts.

Level 5 All Level 1, 2, 3, and 4 strategies, plus: Naked equity calls.

Level 6 All Level 1, 2, 3, 4 and 5 strategies, plus: Naked index calls, Naked index puts.

I hereby confirm that I have read the provisions of this option agreement and understand the contents hereof. I hereby expressly confirm all the information contained in the Customer Information section, especially those concerning income, net worth and investment objectives, and will advise you of any changes in such information which could be deemed to affect the suitability of executing options transactions for my account.

BY SIGNING THIS APPLICATION, I (WE) ACKNOWLEDGE THE FOLLOWING: (1) THAT, PAGE 3 PARAGRAPH #9 OF THE ATTACHED AGREEMENT CONTAINS A PREDISPUTE ARBITRATION CLAUSE AND IN ACCORDANCE WITH THIS AGREEMENT I(WE) AGREE IN ADVANCE TO ARBITRATE ANY CONTROVERSIES WHICH MAY ARISE BETWEEN OR AMONG ME (US), MY BROKER, AND/OR CLEARING FIRM, (2) RECEIPT OF A COPY OF THE AGREEMENT FOLLOWING THIS APPLICATION AND MY (OUR) AGREEMENT WITH THE TERMS THEREIN AND (3) THE INFORMATION PROVIDED ABOVE IS ACCURATE.