

1. Applicable Rules and Regulations. All transactions shall be subject to the constitution, rules, regulations, customs and usages of the exchange or market and its clearing house, if any, upon which such transactions are executed, except as otherwise specifically provided in this Agreement.

2. Definitions. "Introducing broker" means any brokerage firm which introduces securities transactions on behalf of the undersigned, which transactions are cleared through you, whether one or more. **"Obligations"** means all indebtedness, debit balances, liabilities or other obligations of any kind of the undersigned to you, whether now existing or hereafter arising. **"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. **"You"** or **"your"** refers to Penson Financial Services, Inc.

3. Breach; Security Interest. Whenever in your discretion you consider it necessary for your protection, or for the protection of the undersigned's introducing firm or in the event of, but not limited to; (i) any breach by the undersigned of this or any other agreement with you or (ii) the undersigned's failure to pay for securities and other property purchased or to deliver securities and other property sold, you may sell any or all securities and other property held in any of the undersigned's accounts (either individually or jointly with others), cancel or complete any open orders for the purchase or sale of any securities and other property, and/or borrow or buy-in any securities and other property required to make delivery against any sale, including a short sale, effected for the undersigned, all without demand for deposit of collateral, other notice of sale or purchase, or other notice or advertisement, each of which is expressly waived by the undersigned, and/or you may require the undersigned to deposit cash or adequate collateral to the undersigned's account prior to any settlement date in order to assure the performance or payment of any open contractual commitments and/or unsettled transactions. Any and all securities and other property belonging to the undersigned or in which the undersigned may have an interest held by you or carried in any of the undersigned's accounts with you (either individually or jointly with others) shall be subject to a first and prior security interest and lien for the discharge of the undersigned's obligations to you, wherever or however arising and without regard to whether or not you have made advances with respect to such securities and other property, and you are hereby authorized to sell and/or purchase any and all securities and other property in any of the undersigned's accounts, and/or to transfer any such securities and other property among any of the undersigned's accounts to the fullest extent of the law and without notice where allowed. The costs and expenses of collection of the debit balance and any unpaid deficiency in the accounts of the undersigned with you, including but not limited to reasonable attorneys' fees and expenses, incurred and payable or paid by you shall be payable to you by the undersigned.

4. Cancellation. You are authorized, in your discretion, should you for any reason whatsoever deem it necessary for your protection, without notice, to cancel any outstanding order, to close out the accounts of the undersigned, in whole or in part, or to close out any commitment made on behalf of the undersigned.

5. Payment of Indebtedness Upon Demand. The undersigned shall at all times be liable for the payment upon demand of any obligations owing from the undersigned to you, and the undersigned shall be liable to you for any deficiency remaining in any such accounts in the event of the liquidation thereof (as contemplated in Paragraph 3 of this Agreement or otherwise), in whole or in part, by you or by the undersigned; and the undersigned shall make payment of such obligations upon demand. If Customer also holds a futures account with Penson Financial Futures, Inc. ("PFFI"), Customer hereby authorizes Penson, without prior notice, to transfer from any account held with Penson to any account held with PFFI, any assets that PFFI represents to Penson are reasonably required to avoid the calling of margins for such PFFI account or the payment of any obligations owed Penson by Customer. Customer also authorizes Penson to request from PFFI assets held by PFFI that in Penson's judgment may be reasonably required to avoid the calling of margins for a Penson account or the payment of any obligations owed Penson by Customer.

6. Accounts Carried as Clearing Broker. The undersigned understands that you are 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 you. Until receipt from the undersigned of written notice to the contrary, you may accept from and rely upon the undersigned's 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 you act 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 you 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 your representatives, employees or other agents. The undersigned understands that you are not a principal of or partner with, and do not control in any way, the introducing broker or its representatives, employees or other agents. The undersigned understands that you will not review the undersigned's accounts and will have no responsibility for trades made in the undersigned's accounts. You shall not be responsible or liable for any acts or omissions of the introducing broker or its representatives, employees or other agents. Notwithstanding the foregoing, in the event that the undersigned initiates a claim against you in your capacity as clearing broker and does not prevail, the undersigned shall be responsible for the costs and expenses associated with your defense of such claim.

6 A. Accounts Carried as Custodian. In some cases the undersigned's account is being carried by arrangement with the undersigned's Investment Advisor or Investment Manager, who uses Penson as their Broker-Dealer custodian. The undersigned acknowledges that Penson's role as custodian is to hold or custody account assets, distribute or collect funds on behalf of the undersigned's account, execute and clear trades under instruction of the undersigned's Investment Advisor or Investment Manager, generate account statements and provide other custodial services as may be mandated by various regulatory standards and requirements. The undersigned understands that in the capacity as custodian, you will not offer investment advice, review the undersigned's accounts, and will have no responsibility for trades made in the undersigned's accounts. Additionally, in your capacity as custodian, you will not verify the accuracy of management fees that the undersigned's pays to Investment Advisors or Investment Managers pursuant to the terms of the Investment Management Agreement executed between the undersigned and the Investment Advisor or Investment Manager. Notwithstanding the foregoing, in the event that the undersigned initiates a claim against you in your capacity as custodial broker and does not prevail, the undersigned shall be responsible for the costs and expenses associated with your defense of such claim.

7. Communications. You may send communications to the undersigned at the undersigned's address or at such other address as the undersigned may hereafter give you in writing, and all communications so sent, whether by mail, telegraph, or otherwise, shall be deemed given to the undersigned personally, whether actually received or not. Reports of execution of orders and statements of accounts of the undersigned shall be conclusive if not objected to in writing to you, the former within five (5) days and the latter within ten (10) days, after forwarding by you.

THE FOLLOWING ARBITRATION AGREEMENT SHOULD BE READ IN CONJUNCTION WITH THESE DISCLOSURES:

- 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.
- e. THE PANEL OF ARBITRATORS WILL TYPICALLY 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.

8. ARBITRATION AGREEMENT. ANY AND ALL CONTROVERSIES, DISPUTES OR CLAIMS BETWEEN THE UNDERSIGNED 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 UNDERSIGNED'S ACCOUNTS, SHALL BE CONDUCTED PURSUANT TO THE CODE OF ARBITRATION PROCEDURE OF THE FINRA. ARBITRATION MUST BE COMMENCED BY SERVICE OF A WRITTEN DEMAND FOR ARBITRATION OR A WRITTEN NOTICE OF INTENTION TO ARBITRATE. 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 de-certified; 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.

9. Representations. The undersigned represents that the undersigned is of majority age, that the undersigned is not an employee of any exchange, or of any corporation of which any exchange owns a majority of the capital stock, or of a member of any exchange, or of a member firm or member corporation registered on any exchange or of a bank, trust company, insurance company or of any corporation, firm or individual engaged in the business dealing either as broker or as principal in securities, bills of exchange, acceptances or other forms of commercial paper. If the undersigned is a corporation, partnership, trust or other entity, the undersigned represents that its governing instruments permit this Agreement, that this Agreement has been authorized by all applicable persons and that the undersigned signatory is authorized to bind the undersigned. The undersigned represents that the undersigned shall comply with all applicable laws, rules and regulations in connection with the undersigned's account. The undersigned further represents that no one except the undersigned has an interest in the account or accounts of the undersigned with you.

10. Joint Accounts. If the undersigned shall consist of more than one person, the undersigned's obligations under this Agreement shall be joint and several. References to the "undersigned" shall include each of the undersigned. You may rely on transfer or other instructions from any one of the undersigned in a joint account, and such instructions shall be binding on each of the undersigned. You may deliver securities or other property to, and send confirmations; notices, statements and communications of every kind, to any one of the undersigned, and such action shall be binding on each of the undersigned. Notwithstanding the foregoing, you are authorized in your discretion to require joint action by the joint tenants with respect to any matter concerning the joint account, including but not limited to the giving or cancellation of orders and the withdrawal of money, securities, futures or commodities.

11. Other Agreements. If the undersigned trades any options, the undersigned agrees to be bound by the terms of your **Customer Option Agreement**. The undersigned understands that copies of these agreements are available from you and, to the extent applicable, are incorporated by reference herein. The terms of these other agreements are in addition to the provisions of this Agreement and any other written agreements between you and the undersigned.

12. 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 you is 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 you or any of your 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 you or your 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 you or with the delay or inability to use such reports.

13. Order Flow Disclosure. Depending on the security traded and absent specific direction from the undersigned, stock orders are routed via an electronic system to a listed, FINRAAQ or over the counter broker or dealer. You or your correspondents may receive cash payments for routing such orders to specific brokers or dealers. Because these agents are market makers, they carry inventory in their specific securities, allowing for price improvement to the undersigned by trading through their inventories. Accordingly, the undersigned's orders will always be executed at the "best bid" or "best offer", or at a price superior to either, by virtue of the market maker's inventory positioning capabilities.

14. Credit Check. You are authorized, in your discretion, should you for any reason deem it necessary for your protection to request and obtain a consumer credit report for the undersigned.

15. Miscellaneous. If any provision of this Agreement is held to be unenforceable, it shall not affect any other provision of this Agreement. The headings of each section 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 laws 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 you, 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 in writing signed by your authorized representative. This Agreement and all provisions shall inure to the benefit of you and your successors, whether by merger, consolidation or otherwise, your assigns, the undersigned's introducing broker, and all other persons specified in Paragraph 8. You shall not be liable for losses caused directly or indirectly by any events beyond your reasonable control, including without limitation, government restrictions, exchange or market rulings, suspension of trading or unusually heavy trading in securities, a general change in economic, political or financial conditions, war or strikes. You may transfer the accounts of the undersigned to your successors and assigns. This Agreement shall be binding upon the heirs, executors, administrators, successors and assigns of the undersigned.

16. Account Protection. SIPC provides up to a maximum of \$500,000 of securities protection, of which up to \$100,000 may be to satisfy a claim for cash, for each protected account. Additional information regarding SIPC, including a SIPC brochure, is available by contacting SIPC at (www.sipc.org) or by calling 202-371-8300. In addition to SIPC membership, our clearing firm holds "Excess SIPC" Insurance of \$200,000,000 in the aggregate, over all customer accounts, subject to a maximum limit of \$900,000 per Customer in respect to cash.

This "Excess SIPC" protection is in addition to the protection provided by the Securities Investors Protection Act, which is administered by SIPC and is subject to certain conditions and limitations. SIPC and Excess SIPC provide coverage against loss of securities and cash, not against market depreciation, fluctuation in market value of your securities or trading loss.

Additionally, for margin and/or short accounts, the following provisions are also applicable:

17. Liquidation. In the event of the death of the undersigned, or in the event the margin in any account in which the undersigned has an interest shall in either your or the introducing broker's discretion become unsatisfactory to either you or the introducing broker, or be deemed insufficient by either you or the introducing broker, you are hereby authorized; (a) to sell any or all securities or other property which you may hold for the undersigned (either individually or jointly with others); (b) to buy any or all securities and other property which may be short in such accounts; and/or (c) to cancel any open orders and to close any or all outstanding contracts; all without demand for margin or additional margin, notice of sale or purchase, or other notice or advertisement, and that any prior demand or notice shall not be a waiver of your rights provided herein. You may likewise accept and rely upon instructions which you receive from the introducing broker to effect any of the aforementioned transactions (as noted in (a); (b); and (c). You shall have the discretion to determine which securities and other property are to be sold and which contracts are to be closed. Any such sales or purchases may be made at your discretion on any exchange, the over-the-counter market or any other market where such business is usually transacted, or at public auction or private sale, and you may be the purchaser for your own account.

18. Hypothecation. Within the limitations imposed by applicable laws, rules and regulations, all securities now or hereafter held by you, or carried by you in any account for the undersigned (either individually or jointly with others), or deposited to secure same, may from time to time, without any notice, be carried in your general loans and may be pledged, repledged, hypothecated or re-hypothecated, separately or in common with other securities for the sum due to you thereon or for a greater sum and without retaining in your possession or control for delivery a like amount of similar securities. The IRS requires Broker Dealers to treat dividend payments on loaned securities positions as in-lieu dividends for 1099 tax reporting purposes. Taxation of substitute dividend payments may be greater than ordinary on qualified dividends. It is understood, however, that you agree to deliver to the undersigned upon demand and upon payment of the full amount due thereon, all securities in such accounts, but without obligation to deliver the same certificates or securities deposited by the undersigned originally. Any securities in the undersigned's margin or short account may be borrowed by you, or lent to others.

19. Interest. Debit balances in all the accounts of the undersigned shall be charged with interest in accordance with your established custom, as disclosed to the undersigned in the Customer Information Brochure pursuant to the provisions of Rule 10b-16 of the Securities Exchange Act.

20. Margin. The undersigned agrees to maintain in all accounts with you such positions and margins as required by all applicable statutes, rules, regulations, procedures and custom, or as you deem necessary or advisable. The undersigned agrees to promptly satisfy all margin and maintenance calls.

21. Sales. The undersigned agrees to specifically designate any order to sell a security which the undersigned does not own as a short sale, and understands that you will mark such order as a short sale. The undersigned agrees that any order which is not specifically designated as a short sale is a sale of securities owned by the undersigned, and that the undersigned will deliver the securities on or before settlement date, if not already in the account. If the undersigned should fail to make such delivery in the time required, you are authorized to borrow such securities as necessary to make delivery for the undersigned's sale, and the undersigned agrees to be responsible for any loss you may thereby sustain, or which you may sustain as a result of your inability to borrow such securities.