Interactive Brokers Institutional Services Customer Agreement

A. GENERAL PROVISIONS:

1. Customer Agreement: This Agreement ("Agreement") governs the relationship between Customer and Interactive Brokers LLC ("IB") for Execution and/or Settlement and Carrying Services. If provisions of this Agreement vary from the IB website or from other agreements between the parties, including but not limited to the FIA Uniform Brokerage Services Agreement or the SIA Prime Brokerage Agreement, this Agreement controls. This Agreement cannot be amended or waived except in writing by an IB officer. Customer Service employees cannot amend or waive any part of this Agreement.

2. Order Execution: Orders subject to this Agreement may be executed: a) by IB or b) by an Executing Broker and given up to IB for settlement and carrying by IB but only if that Executing Broker and IB (as Prime Broker) have signed an agreement (such as the SIA Prime Brokerage Agreement and/or FIA Uniform Brokerage Services Give Up Agreement) providing for IB to take up Customer trades executed by that Executing Broker.

3. Trade Settlement and Carrying of Account: Trades may be: a) settled and carried by IB or b) given up by IB for settlement and carrying by such other broker-dealers or futures commission merchants as Customer may designate as Customer's Prime Brokers, but only if IB has entered into an agreement (such as the SIA Prime Brokerage Agreement and/or FIA Uniform Brokerage Services Give Up Agreement) with Customer's Prime Brokers with respect to such transactions.

4. No Investment, Tax or Trading Advice: IB representatives are not authorized to provide investment, tax or trading advice or to solicit orders. Nothing on IB's website is a recommendation or solicitation to buy or sell securities, futures or other investments.

5. Customer Qualification: Customer and its authorized representatives warrant that Customer: (i) is authorized under its governing document(s) and in the jurisdictions in which it is organized and/or regulated to enter this Agreement and trade (including on margin if applicable); (ii) is under no legal incapacity; and (iii) that persons identified to enter orders have proper authority and have sufficient knowledge and experience to understand the nature and risks of the products to be traded.

6. Responsibility for Customer Orders/Trades: Customer acknowledges that IB does not know whether someone entering orders with Customer's user name/password is Customer. Unless IB is notified and agrees, Customer will not allow anyone to access Customer's account. Customer is responsible for the confidentiality and use of Customer's user name/password and agrees to report any theft/loss of such user name/password, or any unauthorized access to Customer's account, immediately by telephone or electronically through the IB website. Customer remains responsible for all transactions entered using Customer's user name/password.

7. IB-Executed Orders: IB shall execute Customer orders as agent, unless otherwise confirmed. IB can execute Customer orders as principal. IB may use another broker, or an affiliate, to execute orders, and they have benefit of all IB's rights hereunder. Unless otherwise directed, IB will select the market/dealer to which to route Customer's orders. For products traded at multiple markets, IB may provide "Smart Routing", which seeks the best market for each order through a computerized algorithm. Customer should choose Smart Routing if available. If Customer directs orders to a particular market, Customer assumes responsibility for knowing and trading in accordance with the rules and policies of that market (e.g., trading hours, order types, etc.). Customer acknowledges that it may not be possible to cancel/modify an order and that Customer is responsible for executions notwithstanding a cancel/modify request. Customer understands that IB, in its sole discretion, may refuse to accept or execute transactions on Customer's behalf or restrict or prohibit trading in Customer's account(s).

8. Proprietary Trading - Display of Customer Orders: Subject to all laws and regulations and subject to information barriers in place between IB and its affiliates engaged in proprietary trading, Customer authorizes IB to execute proprietary trades of itself and its affiliates,
though IB may simultaneously hold unexecuted Customer orders for the same products at the same price.

9. **Confirmations:** Customer agrees to monitor each order until IB confirms execution or cancellation. Customer acknowledges that confirmations of executions or cancellations may be delayed or may be erroneous (e.g. due to computer system issues) or may be cancelled/adjusted by an exchange. Customer is bound by the actual order execution, if consistent with Customer's order. Customer agrees to notify IB immediately by telephone or electronically through the IB website if: i) Customer fails to receive an accurate confirmation of an execution or cancellation; ii) Customer receives a confirmation that is different than Customer's order; iii) Customer receives a confirmation for an order that Customer did not place; or iv) Customer receives an account statement, confirmation, or other information reflecting inaccurate orders, trades, balances, positions, margin status or transaction history. Customer acknowledges that IB may adjust Customer's account to correct any error. Customer agrees to promptly return to IB any assets erroneously distributed to Customer. All transactions are subject to rules and policies of relevant markets and clearinghouses, and applicable laws and regulations.

**IB IS NOT LIABLE FOR ANY ACTION OR DECISION OF ANY EXCHANGE, MARKET, DEALER, CLEARINGHOUSE OR REGULATOR.**

10. **Commissions and Fees, Interest Charges, Funds:** Commissions and fees are at the rates specified on the IB website unless a specific commission/fee schedule has been agreed in writing between Customer and IB. If no written commission/fee schedule has been agreed between Customer and IB, changes to commissions/fees are effective immediately upon either of: posting on the IB website or email or other written notice to Customer. Unpaid balances and account deficits accrue interest at the rate of 1% per month. Customer agrees to pay reasonable costs of collection for any unpaid Customer deficit or balance, including attorneys' and collection agent fees.

   a. **For accounts carried by IB:** Customer acknowledges that IB deducts commissions/fees from Customer accounts, which will reduce account equity. Positions will be liquidated if commissions or other charges cause a margin deficiency. IB shall pay credit interest to and charge debit interest from Customer at interest rates and terms on the IB website, unless otherwise agreed in writing. Customer funds will not be disbursed until after transactions are settled. Terms and conditions for deposit and withdrawal of funds (including holding periods) are as specified on the IB website.

   b. **For accounts not carried by IB:** Customer shall pay commissions and fees within ten days of receipt of IB's statement.

11. **Suspicious Activity:** If IB in its sole discretion believes that a Customer account has been involved in any fraud or crime or violation of laws or regulations, or has been accessed unlawfully, or is otherwise involved in any suspicious activity (whether victim or perpetrator or otherwise), IB may suspend or freeze the account or any privileges of the account, may freeze or liquidate funds or assets or may utilize any of the remedies in this Agreement for a "Default".

12. **Security Interest:** All Customer assets of any kind held by or on behalf of IB for Customer's account are hereby pledged to IB and are subject to a perfected first priority lien and security interest in IB's favor to secure performance of obligations and liabilities to IB arising under this or any other Agreement.

13. **No Restricted Securities:** Unless Customer has notified IB to the contrary, no assets held as Collateral are restricted securities, as such term is defined pursuant to Rule 144 under the Securities Act of 1933, (the Securities Act), or securities of an issuer with which Customer is an affiliate, and Customer will not attempt to sell such shares through IB without prior notice to and consent of IB.

14. **Event of Default:** A "Default" occurs automatically, without notice upon: (i) Customer breach/repudiation of any agreement with IB; (ii) Customer failure to provide assurance satisfactory to IB of performance of an obligation, after request from IB in IB's sole discretion; (iii) proceedings by/against Customer under any bankruptcy, insolvency, or similar law; (iv) assignment for the benefit of Customer's creditors; (v) appointment of a receiver, trustee, liquidator or similar officer for Customer or Customer property; (vi) Customer representations being untrue or misleading when made or later becoming untrue; (vii) legal incompetence of Customer; (viii) proceeding to suspend Customer business or license by any regulator or organization; (ix) IB having reason to believe that any of the foregoing is likely to occur imminently. Customer unconditionally agrees that, upon a Default, IB may terminate any or all IB's obligations to Customer and IB shall have the right in its discretion, but not the obligation, without prior notice, to liquidate all or any part of Customer's positions in any IB account, individual or joint, at any time and any manner and through any market or dealer. Customer shall reimburse and hold IB harmless for all actions, omissions, costs, fees (including, but not limited to, attorney's fees), or liabilities associated with any Customer Default or any transaction undertaken by IB upon Default.
15. **Risks of Foreign Markets; After Hours Trading:** Customer acknowledges that trading securities, options, futures, currencies, or any product on a foreign market is speculative and involves high risk. There also are special risks of trading outside ordinary market hours, including risk of lower liquidity, higher volatility, changing prices, un-linked markets, news announcements affecting prices, and wider spreads. Customer represents that Customer is knowledgeable and able to assume these risks.

16. **Risks Regarding Political and Governmental Actions:** Governments of countries in which IBKR clients reside, or countries in which IBKR clients invest, may take economic and/or political actions that are adverse to investors and such actions may negatively affect Customer's account. Customer agrees that IBKR is not liable for such actions. For example, if Customer invests in securities, futures, foreign currency or other investment products in a foreign jurisdiction, such assets, or cash to secure such assets, typically will be held at a bank, clearinghouse or other facility in such foreign jurisdiction. Assets and cash held in foreign jurisdictions are inherently vulnerable to the risk that the government in such jurisdiction could freeze or confiscate or take some other action against such assets for some purpose, temporarily or permanently. Likewise, even with respect to investments within Customer's own country, governments may freeze or take other action against such assets on the basis of political, economic, or military conflict. Customer acknowledges and agrees that IBKR (and its affiliates) cannot and will not protect Customer from actions by any governmental, political, military, or economic actor that may adversely impact Customer's assets held by IBKR, its agents or subcustodians. Customer agrees that that IBKR (and its affiliates) is not liable for any losses or damages Customer may incur as a result of any such action.

17. **Knowledge of Securities, Warrants and Options; Corporate Actions:** Customer acknowledges Customer's responsibility for knowing the terms of any securities, futures contracts, options, warrants or other products in Customer's account, including upcoming corporate actions (e.g., tender offers, reorganizations, stock splits, etc.). IB has no obligation to notify Customer of deadlines or required actions or dates of meetings, nor is IB obligated to take any action without specific written instructions sent by Customer to IB electronically through the IB website.

18. **Quotes, Market Information, Research and Internet Links:** Quotes, news, research and information accessible through IB (including through links to outside websites) ("Information") may be prepared by independent Providers. The Information is the property of IB, the Providers or their licensors and is protected by law. Customer agrees not to reproduce, distribute, sell or commercially exploit the Information in any manner without written consent of IB or the Providers. IB reserves the right to terminate access to the Information. None of the Information constitutes a recommendation by IB or a solicitation to buy or sell. Neither IB nor the Providers guarantee accuracy, timeliness, or completeness of the Information, and Customer should consult an advisor before making investment decisions. **RELIANCE ON QUOTES, DATA OR OTHER INFORMATION IS AT CUSTOMER'S OWN RISK. IN NO EVENT WILL IB OR THE PROVIDERS BE LIABLE FOR CONSEQUENTIAL, INCIDENTAL, SPECIAL OR INDIRECT DAMAGES ARISING FROM USE OF THE INFORMATION. THERE IS NO WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, REGARDING THE INFORMATION, INCLUDING WARRANTY OF MERCHANTABILITY, WARRANTY OF FITNESS FOR A PARTICULAR USE OR WARRANTY OF NON-INFRINGEMENT.**

19. **License to Use IB Software:** IB grants Customer a non-exclusive, non-transferable license to use IB Software solely as provided herein. Title to IB Software and updates shall remain the sole property of IB, including all patents, copyrights and trademarks. Customer shall not sell, exchange or transfer the IB Software to others. Customer shall not copy, modify, translate, decompile, reverse engineer, disassemble or reduce to a human readable form, or adapt, the IB Software or use it to create a derivative work, unless authorized in writing by an officer of IB. IB is entitled to immediate injunctive relief for threatened breaches of these undertakings.

20. **LIMITATION OF LIABILITY AND LIQUIDATED DAMAGES PROVISION:** CUSTOMER ACCEPTS THE IBKR SYSTEM "AS IS", AND WITHOUT WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE, PURPOSE OR APPLICATION; TIMELINESS; FREEDOM FROM INTERRUPTION; OR ANY IMPLIED WARRANTIES ARISING FROM TRADE USAGE, COURSE OF DEALING OR COURSE OF PERFORMANCE. UNDER NO CIRCUMSTANCES SHALL IB BE LIABLE FOR ANY PUNITIVE, INDIRECT, INCIDENTAL, SPECIAL OR CONSEQUENTIAL LOSS OR DAMAGES, INCLUDING LOSS OF BUSINESS, PROFITS OR GOODWILL. IB SHALL NOT BE LIABLE TO CUSTOMER FOR ANY SYSTEM FAILURE (AS DEFINED IN PARAGRAPH A.21), DELAYS OR INTERRUPTIONS OF SERVICE OR TRANSMISSIONS, OR FAILURES OF PERFORMANCE OF THE IBKR SYSTEM, REGARDLESS OF CAUSE, INCLUDING, BUT NOT LIMITED TO, THOSE CAUSED BY HARDWARE OR SOFTWARE MALFUNCTION; HUMAN ERROR; GOVERNMENTAL, EXCHANGE OR OTHER REGULATORY ACTION; ACTS OF GOD; WAR, TERRORISM, OR IB'S INTENTIONAL ACTS. CUSTOMER RECOGNIZES THAT THERE MAY BE DELAYS OR
INTERRUPTIONS IN THE USE OF THE IBKR SYSTEM, INCLUDING, FOR EXAMPLE, THOSE CAUSED INTENTIONALLY BY IB FOR PURPOSES OF SERVICING THE IBKR SYSTEM, OR BY IB’S FAILURE TO ACT TO PREVENT SERVICE DISRUPTION OR SYSTEM FAILURE (AS DEFINED IN PARAGRAPH A.21). IN NO EVENT SHALL IB’S LIABILITY REGARDLESS OF THE FORM OF ACTION AND DAMAGES SUFFERED BY CUSTOMER, EXCEED THE AGGREGATE COMMISSIONS PAID BY CUSTOMER TO IB OVER THE 6 MONTHS PRIOR TO THE EVENT GIVING RISE TO CUSTOMER’S CLAIM.

21. System Failure and Alternative Trading Arrangements: Customer acknowledges that IBKR uses computer-based automated systems in connection with providing services, including but not limited to: the receipt and handling of orders; the execution and cancellation of orders; order and trade confirmation; the clearing and settlement of transactions; tax-related reporting; the delivery of corporate action information; account management; storing and processing account information; and risk management, (collectively, "IBKR System"). Customer understands that the use of IBKR System entails risks, including but not limited to: interruption or delays of service and systems, network or communications failures; cyberattacks; and errors in the design or functionality of such IBKR Systems (collectively, a "System Failure") that could cause damage, expense, or liability to Client.

IBKR is not liable to Customer for any loss Customer may suffer due to any System Failure. In order to mitigate the risk of loss to Customer that may be caused by a System Failure, Customer acknowledges that it should maintain alternative trading arrangements of sufficient capacity and utility to allow Customer to open, close or change positions as necessary to modify risk of loss to Client during a System Failure. By not maintaining alternative trading arrangements, Customer expressly assumes the risk of not being able to process transactions, including executing trades, through Customer's account at IBKR in the event of a System Failure. Customer agrees that IBKR's commissions and fees charged under this Agreement reflect the allocation of risk between the parties, including the allocation of risk under this Paragraph A.21 and the limitation of liability in Paragraph A.20. Customer acknowledges that IBKR's commissions and fees charged by IBKR would be higher or IBKR would not have entered into this Agreement without this allocation of risk and limitation of liability.

22. Consent To Accept Electronic Records And Communications: IB provides electronic trade confirmations, account statements, tax information, proxy materials and other Customer records and communications (collectively, "Records and Communications") in electronic form to the maximum extent permitted by applicable law. Electronic Records and Communications may be sent to Customer's Trader Workstation ("TWS") or to Customer's e-mail address, or for security purposes may be posted on the IB website or on the secure website of one of IB?s service providers and customer will need to log in and retrieve the Communication. By entering into this Agreement, Customer consents to the receipt of electronic Records and Communications. Such consent will apply on an ongoing basis and for every tax year unless withdrawn by Customer. Customer may withdraw such consent at any time by providing electronic notice to IB through the IB website. If Customer withdraws such consent, IB will provide required Records and Communications (e.g., tax documents, proxy materials, etc.) in paper form upon request by telephone or via the IB website. However, IB reserves the right to require Customer to close Customer's account if Customer withdraws consent to receiving electronic delivery of Records and Communications. In order to trade using the IB TWS, and to receive Records and Communications through the TWS, there are certain system hardware and software requirements, which are described on the IB Website at www.interactivebrokers.com. Since these requirements may change, Customer must periodically refer to the IB website for current system requirements. To receive electronic mail from IB, Customer is responsible for maintaining a valid Internet e-mail address and software allowing customer to read, send and receive e-mail. Customer must notify IB immediately of a change in Customer's e-mail address by using those procedures to change a Customer e-mail address that may be available on the IB website.

B. PROVISIONS RELATING TO TRades AND POSITIONS TO BE SETTLED OR CARRIED BY IB:

1. Application: The provisions of this Section B shall apply to trades and positions: a) executed, settled and carried by IB; or b) executed by another Executing Broker and given up to IB for settlement and carrying; or c) trades or positions that Customer's Prime Broker indicates its intention not to settle or take up, or fails to settle or take up.

2. Margin:
   a. Requirement to Maintain Sufficient Margin Continuously: Margin transactions are subject to initial and maintenance margin requirements of exchanges, clearinghouses and regulators and also to any additional margin requirement of IB, which may be greater ("Margin Requirements"). IB MAY MODIFY MARGIN REQUIREMENTS FOR ANY OR ALL CUSTOMERS FOR ANY OPEN OR NEW POSITIONS AT ANY TIME, IN IB’S SOLE DISCRETION. CUSTOMER SHALL MAINTAIN, WITHOUT NOTICE OR DEMAND, SUFFICIENT EQUITY AT ALL TIMES TO CONTINUOUSLY MEET MARGIN REQUIREMENTS.
CUSTOMER SHALL MONITOR ITS ACCOUNT SO THAT AT ALL TIMES THE ACCOUNT CONTAINS SUFFICIENT EQUITY TO MEET MARGIN REQUIREMENTS. IF THE ACCOUNT HAS INSUFFICIENT EQUITY TO MEET MARGIN REQUIREMENTS, IB MAY REJECT ANY ORDER SUBMITTED BY CUSTOMER OR DECLARE ACCEPT FOR SETTLEMENT (OR MAY "DK" OR DISAFFIRM OR RETURN) OR MAY LIQUIDATE ANY POSITION SUBMITTED TO IB BY EXECUTING BROKER FOR SETTLEMENT. Formulas for calculating Margin Requirements on the IB website are indicative only and may not reflect actual Margin Requirements. Customer must at all times satisfy whatever Margin Requirement is calculated by IB.

b. **IB Will Not Issue Margin Calls:** IB does not have to notify Customer of any failure to meet Margin Requirements prior to IB exercising its rights under this Agreement. Customer acknowledges that IB generally will not issue margin calls; generally will not credit Customer’s account to meet intraday or overnight margin deficiencies; and is authorized to liquidate account positions in order to satisfy Margin Requirements without prior notice.

c. **Liquidation of Positions and Offsetting Transactions:**
   i. IF AT ANY TIME CUSTOMER'S ACCOUNT HAS INSUFFICIENT EQUITY TO MEET MARGIN REQUIREMENTS OR IS IN DEFICIT, IB HAS THE RIGHT, IN ITS SOLE DISCRETION, BUT NOT THE OBLIGATION, TO LIQUIDATE ALL OR ANY PART OF CUSTOMER'S POSITIONS IN ANY OF CUSTOMER'S IB ACCOUNTS, AT ANY TIME AND IN ANY MANNER AND THROUGH ANY MARKET OR DEALER, WITHOUT PRIOR NOTICE OR MARGIN CALL TO CUSTOMER. CUSTOMER SHALL BE LIABLE AND WILL PROMPTLY PAY IB FOR ANY DEFICIENCIES IN CUSTOMER'S ACCOUNT THAT ARISE FROM SUCH LIQUIDATION OR REMAIN AFTER SUCH LIQUIDATION. IB HAS NO LIABILITY FOR ANY LOSS SUSTAINED BY CUSTOMER IN CONNECTION WITH SUCH LIQUIDATIONS (OR IF THE IBKR SYSTEM DELAYS EFFECTING, OR DOES NOT EFFECT, SUCH LIQUIDATIONS) EVEN IF CUSTOMER RE-ESTABLISHES ITS POSITION AT A WORSE PRICE.

   ii. IB may allow Customer to pre-request the order of liquidation in event of a margin deficiency, but such requests are not binding on IB and IB retains sole discretion to determine the assets to be liquidated and the order/manner of liquidation. IB may liquidate through any market or dealer, and IB or its affiliates may take the other side of the transactions consistent with laws and regulations. If IB liquidates any/all positions in Customer's account, such liquidation shall establish Customer's gain/loss and remaining indebtedness to IB, if any. Customer shall reimburse and hold IB harmless for all actions, omissions, costs, fees (including, but not limited to, attorney's fees), or liabilities associated with any such transaction undertaken by IB. If IB executes an order (or receives for settlement from Customer's Executing Broker a position) for which Customer did not have sufficient equity, IB has the right, without notice, to liquidate the position (or to liquidate any other positions in Customer's account sufficient to restore account equity to comply with margin requirements) and Customer shall be responsible for any resulting loss.

   iii. If IB does not, for any reason, liquidate under-margined positions, and issues a margin call, Customer must satisfy such call immediately by depositing funds. Customer acknowledges that even if a call is issued, IB still may liquidate positions at any time.

   iv. Customer acknowledges that IB also has the right to liquidate all or part of Customer's positions without prior notice: (i) if any dispute arises concerning any Customer trade, (ii) upon any "Default" as described in this Agreement, or (iii) whenever IB deems liquidation necessary or advisable for IB's protection.

3. **Universal Accounts:** An IB Universal Account is two underlying accounts: an SEC-regulated securities account and a CFTC-regulated commodity account. Customer authorizes transfers between the securities and commodity accounts to cover Margin Requirements and other obligations, and acknowledges IB may liquidate positions to cover obligations in the other account. Customer authorizes IB to provide combined confirmations/statements for both accounts. **Customer acknowledges that only assets in the securities account are covered by SIPC protection and excess coverage and not assets in the commodity account.**

4. **Short Sales:** Customer acknowledges that short sales must be done in a margin account, subject to Margin Requirements; that prior to selling short, IB must believe it can borrow stock for delivery;
and that if IB cannot borrow stock (or re-borrow after a recall notice) IB may buy-in stock on
Customer's behalf, without notice to Customer, to cover short positions and Customer is liable for
any losses/costs.

5. **IB's Right to Loan/Pledge Customer Assets**: As allowed by law, IB is authorized by Customer to
lend to itself or others Customer securities or assets. IB may, without notice, pledge, re-pledge,
hypothecate or re-hypothecate Customer securities and assets, separately or together with those
of other customers, for any amount due in any IB account in which Customer has an interest,
without retaining in IB's possession or control a like amount of assets. For loans of securities, IB
may receive financial and other benefits to which Customer is not entitled. Such loans could limit
Customer's ability to exercise securities' voting rights.

6. **Multi-Currency Function in IB Accounts**:
   a. Customers may be able to trade products denominated in different currencies using a
      base currency chosen by Customer. Upon purchase of a product denominated in a
different currency from the base currency, a margin loan is created to fund the
purchase, secured by the assets in Customer's accounts. If Customer maintains
positions denominated in foreign currencies, IB will calculate Margin Requirements by
applying exchange rates specified by IB. **IB WILL APPLY "HAIRCUTS" (A
   PERCENTAGE DISCOUNT ON THE FOREIGN CURRENCY EQUITY AMOUNT) TO
   REFLECT THE POSSIBILITY OF FLUCTUATING EXCHANGE RATES BETWEEN
   THE BASE CURRENCY AND THE FOREIGN CURRENCY. CUSTOMER MUST
   CLOSELY MONITOR MARGIN REQUIREMENTS AT ALL TIMES, PARTICULARLY
   FOR POSITIONS DENOMINATED IN FOREIGN CURRENCIES, BECAUSE
   FLUCTUATION IN THE CURRENCY AND THE VALUE OF THE UNDERLYING
   POSITION CAN CAUSE A MARGIN DEFICIT.**
   b. Customer agrees that IB's obligations to Customer shall be denominated in: (i) the
      United States dollar; (ii) a currency in which funds were deposited by Customer or were
      converted at the request of Customer, to the extent of such deposits and conversions;
or (iii) a currency in which funds have accrued to the customer as a result of trading
conducted on a designated contract market or registered derivatives transaction
execution facility, to the extent of such accruals. Information regarding Customer’s
currency conversions is provided on the IB customer statements. Customer further
agrees that IB may hold customer funds in: (i) the United States; (ii) a money center
country as defined by the US Commodity Exchange Act & regulations thereunder; or (iii)
the country of origin of the currency. In addition, Customer acknowledges and
authorizes IB to hold Customer's funds outside the United States, in a jurisdiction that is
neither a money center country nor the country of origin of the currency in order to
facilitate Customer's trading in investments denominated in that currency.

7. **Foreign Currency Exchange ("Forex") Transactions**:
   a. **HIGH RISKS OF FOREX TRADING: FOREX TRADING IS GENERALLY
      UNREGULATED, IS HIGHLY RISKY DUE TO THE LEVERAGE (MARGIN)
      INVOLVED, AND MAY RESULT IN LOSS OF FUNDS GREATER THAN CUSTOMER
      DEPOSITED IN THE ACCOUNT. Customer acknowledges the “Risk Disclosure
      Statement for Forex Trading and Multi-Currency Accounts” provided separately
      by IB.**
   b. For Forex transactions, IB generally will act as agent or riskless principal and charge a
      fee. IB may effect Forex transactions through an affiliate or third party, which may profit
      or lose from such transactions. Customer agrees that IB may transfer to or from
      Customer's regulated futures or securities account(s) from or to any of Customer's non-
      regulated Forex account any funds or assets that may be required to avoid margin calls,
      reduce debit balances or for any other lawful reason.
   c. **Netting**: (i) **Netting by Novation**. Each Forex transaction between Customer and IB will
      immediately be netted with all then existing Forex transactions between Customer and
      IB for the same currencies to constitute one transaction. (ii) **Payment Netting**. If on any
delivery date more than one delivery of a currency is due, each party shall aggregate
the amounts deliverable and only the difference shall be delivered. (iii) **Close-Out
Netting**. If Customer: (a) incurs a margin deficit in any IB account, (b) defaults on any
obligation to IB, (c) becomes subject to bankruptcy, insolvency or other similar
proceedings, or (d) fails to pay debts when due, IB has the right but not the obligation to
close-out Customer's Forex transactions, liquidate all or some of Customer's collateral
and apply the proceeds to any debt to IB. (iv) **Upon Close-Out Netting or any “Default”,
all outstanding Forex transactions will be deemed terminated as of the time immediately
preceding the triggering event, petition or proceeding. (v) IB's rights herein are in
addition to any other rights IB has (whether by agreement, by law or otherwise).**
Nothing herein constitutes a commitment of IB to offer Forex transactions generally or to enter into any specific Forex transaction. IB reserves the unlimited right to refuse any Forex order or to decline to quote a two-way market in any currency.

8. **Commodity Options and Futures Not Settled in Cash:** Customer acknowledges that: (A) commodity options cannot be exercised and must be closed out by offset; and (B) for futures contracts that settle not in cash but by physical delivery of the commodity (including currencies not on IB's Deliverable Currency List), Customer cannot make or receive delivery. If Customer has not offset a commodity option or physical delivery futures position prior to the deadline on the IB website, IB is authorized to roll or liquidate the position or liquidate any position or commodity resulting from the option or futures contract, and Customer is liable for all losses/costs.

C. **PROVISIONS RELATING TO TRADES TO BE EXECUTED BY IB AND GIVEN UP TO CUSTOMER'S PRIME BROKER FOR SETTLEMENT:**

1. **Application:** The provisions of this Section C shall apply to trades and positions to be executed by IB and given up for settlement to Customer's Prime Broker.

2. **Securities Transactions:** IB will clear Customer's securities transactions in a broker-dealer credit account established in the name of Prime Broker and designated for Customer's benefit. On the settlement date for each transaction, IB will deliver or receive Customer's securities to or from Prime Broker against payment in full by or to Prime Broker on Customer's behalf.

3. **Commodities Transactions:** Commodity transactions will be handled in accordance with a Give-Up Agreement to be executed separately herefrom.

4. **Customer Trade Data:** Customer hereby authorizes IB to inform Prime Broker of all the details of each transaction for Customer's account ("Trade Data"), and Customer hereby agrees to inform Prime Broker of the Trade Data on trade date by the time designated to Customer by Prime Broker. In the event of any discrepancy in the Trade Data reported to Prime Broker by Customer and the Trade Data reported to Prime Broker by IB, Customer shall be responsible for resolving such discrepancy promptly, and Customer shall be liable to IB for any loss, cost or expense sustained by IB arising out of such transaction.

5. **Short, Short Exempt and Long Sales:** When placing any order to sell securities short, Customer is responsible for designating the order as such, and Customer hereby authorizes IB to mark the order as being "short" or "short exempt". In placing any long sell order, Customer will designate the order as such and hereby authorizes IB to mark the order as being "long." The designation of a sell order as being "long" shall constitute a representation by Customer that (i) Customer owns the security with respect to which the sale order has been placed and (ii) if Prime Broker does not have the security in its possession at the time Customer places the sell order, Customer shall deliver the security to Prime Broker by settlement date in good deliverable form and if Customer fails to deliver as such, pay to IB any losses and expenses it may incur or sustain as a result of Prime Broker's failure to settle any such transaction on Customer's behalf. Customer further agrees to provide IB with information concerning any securities borrowing arrangements made by Customer and/or Prime Broker in connection with any short sales.

6. **Customer Qualification:**
   
   a. Customer shall be required to maintain in Customer's securities account with Prime Broker such minimum net equity in cash or securities as may be required, from time to time, by Prime Broker (the "Minimum Net Equity"), which shall in no event be less than the minimum net equity required by the SEC's 1994 Prime Brokerage No-Action Letter, as such requirement may be amended from time to time (initially: (i) $100,000 in cash or securities with a ready market, for trades executed on behalf of a customer account managed by an investment adviser registered under Section 203 of the Investment Advisors Act of 1940 (a "Registered Investment Adviser"), or (ii) $500,000 in cash or securities with a ready market for trades executed on behalf of an account not managed by a Registered Investment Advisor). Customer further understands that, in the event Customer's account falls below such Minimum Net Equity, Customer shall bring Customer's account into compliance in a timely fashion. Each time Customer enters an order with IB, Customer hereby represents that Customer shall be in compliance with such Minimum Net Equity or will notify IB otherwise.

   b. In the event that Prime Broker indicates its intention to disaffirm or fail to take up any trade, Customer hereby authorizes and instructs Prime Broker to provide to IB, upon the request of IB, the following information: (i) the account or accounts to which any of Customer's orders or trades relate; (ii) the instructions, if any, provided to Prime Broker regarding the allocation of any orders or trades to any subaccounts; and (iii) information
available to Prime Broker with respect to any net equity in the account. In addition, this Agreement will serve as further authorization and instruction to Prime Broker to furnish to IB in the event of a disaffirmance or failure to take up all such further and additional information concerning an account as IB shall request. This paragraph shall remain in effect so long as this Agreement is in effect, shall survive the termination of this Agreement and shall apply to all orders and trades given by Customer to IB for clearance and settlement through Prime Broker. Customer hereby agrees to release and discharge Prime Broker from all responsibility and liability arising out of or incurred in connection with Prime Broker furnishing any information to IB pursuant to this paragraph.

7. **Confirmations:** IB shall confirm the Trade Data to Prime Broker and shall issue a confirmation for each transaction by the morning of the next business day after trade date. Customer may direct IB to send confirmations to Customer in care of Prime Broker.

8. **Customer’s Settlement Obligation:** In the event Prime Broker indicates its intention not to settle or take up, or fails to settle or take up, any of Customer’s transactions, Customer shall be responsible and liable to IB for settling such transactions directly with IB in a securities margin account or commodities account that IB will open or has opened in Customer’s name on its books in accordance with applicable regulations. The provisions of Section B of this Agreement shall apply to such transactions.

**D. OTHER PROVISIONS:**

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

2. **Miscellaneous:**
   a. This Agreement is governed by the laws of the State of New York, without giving effect to conflict of laws provisions. Courts of New York have exclusive jurisdiction over disputes relating to this Agreement, except when arbitration is provided. IN ALL JUDICIAL ACTIONS, ARBITRATIONS OR DISPUTE RESOLUTION METHODS, THE PARTIES WAIVE ANY RIGHT TO PUNITIVE DAMAGES.
   
   b. Customer agrees to the provision of this Agreement in English and represents that Customer understands its terms and conditions. This Agreement contains the entire agreement between the parties, who have made no other representations or warranties. If any provision of this Agreement is unenforceable, it shall not invalidate other provisions. Failure of IB to enforce any term or condition of this Agreement is not a waiver of the term/condition.
   
   c. Customer consents to recording of all telephone conversations. Customer acknowledges the IBG Privacy Statement and consents to collection/use of Customer information as described therein.
   
   d. Customer may not assign or transfer any rights or obligations hereunder without the prior written consent of IB. Upon notice to Customer IB may assign this Agreement to another broker-dealer or futures commission merchant. This Agreement shall inure to the benefit of IB’s successors and assigns. IB may terminate this Agreement or its services to Customer at any time. Customer may close its account upon notice to IB electronically through the IB website, but only after all positions are closed and all other requirements specified on the IB website regarding account closure are satisfied.

3. **Mandatory Arbitration:**
   a. This agreement contains a pre-dispute arbitration clause. By signing an arbitration agreement the parties agree as follows:
   
   - 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 FORUM IN WHICH A CLAIM IS FILED.

- ARBITRATION AWARDS ARE GENERALLY FINAL AND BINDING; A PARTY'S ABILITY TO HAVE A COURT REVERSE OR MODIFY AN ARBITRATION AWARD IS VERY LIMITED.

- THE ABILITY OF THE PARTIES TO OBTAIN DOCUMENTS, WITNESS STATEMENTS AND OTHER DISCOVERY IS GENERALLY MORE LIMITED IN ARBITRATION THAN IN COURT PROCEEDINGS.

- 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.

- THE PANEL OF ARBITRATORS WILL TYPICALLY INCLUDE A MINORITY OF ARBITRATORS WHO WERE OR ARE AFFILIATED WITH THE SECURITIES INDUSTRY.

- 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.

- THE RULES OF THE ARBITRATION FORUM IN WHICH THE CLAIM IS FILED, AND ANY AMENDMENTS THERETO, SHALL BE INCORPORATED INTO THIS AGREEMENT.

b. Customer agrees that any controversy, dispute, claim, or grievance between IB, any IB affiliate or any of their shareholders, officers, directors employees, associates, or agents, on the one hand, and Customer or, if applicable, Customer's shareholders, officers, directors employees, associates, or agents on the other hand, arising out of, or relating to, this Agreement, or any account(s) established hereunder in which securities may be traded; any transactions therein; any transactions between IB and Customer; any provision of the Customer Agreement or any other agreement between IB and Customer; or any breach of such transactions or agreements, shall be resolved by arbitration, in accordance with the rules then prevailing of any one of the following: (a) The Financial Industry Regulatory Authority; or (b) any other exchange of which IB is a member; as the true claimant-in-interest may elect. If Customer is the claimant-in-interest and has not selected an arbitration forum within ten days of providing notice of Customer's intent to arbitrate, IB shall select the forum. The award of the arbitrators, or a majority of them, shall be final, and judgment upon the award rendered may be entered in any court, state or federal, having jurisdiction.

c. 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:
  - the class certification is denied; or
  - the class is decertified; or
  - 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.

THIS AGREEMENT CONTAINS A PRE-DISPUTE ARBITRATION CLAUSE IN PARAGRAPH D.3. BY SIGNING THIS AGREEMENT I ACKNOWLEDGE THAT THIS AGREEMENT CONTAINS A PRE-DISPUTE ARBITRATION CLAUSE AND THAT I HAVE RECEIVED, READ AND UNDERSTOOD THE TERMS THEREOF.