

OPTION AGREEMENT AND APPROVAL FORM

Carefully read the Option Agreement and make certain that all the information is completed, as appropriate.
Be sure to sign and return the form to the financial organization serving your account (not to Pershing).

I. ACCOUNT INFORMATION

ACCOUNT TITLE: _____

ADDRESS: _____ CITY: _____ STATE: _____ ZIP: _____

ACCOUNT NUMBER: - DATE ACCOUNT OPENED: / /

II. EMPLOYMENT INFORMATION

EMPLOYED SELF-EMPLOYED RETIRED UNEMPLOYED HOMEMAKER STUDENT

EMPLOYER'S NAME: _____ OCCUPATION: _____

III. INVESTMENT PROFILE (Any information not completed shall be deemed to have been refused by the client.)

INVESTMENT OBJECTIVE: (Check all that apply.) INCOME INCOME AND APPRECIATION SPECULATION SHORT-TERM GROWTH LONG-TERM GROWTH
 HEDGING PRESERVATION OF CAPITAL OTHER

PERSONAL INFORMATION: AGE: _____ NUMBER OF DEPENDENTS: _____ MARITAL STATUS: _____

			<input type="checkbox"/> FOR INDIVIDUAL AND JOINT ACCOUNTS		<input type="checkbox"/> FOR CORPORATIONS, PARTNERSHIPS, TRUSTS, OR ESTATES	
Investment Experience			Approx. Annual Income	Approx. Net Worth	Approx. Annual Income	Approx. Net Worth
	No. of Years	Size and Frequency	Amount \$	Cash \$	Amount \$	Cash \$
Options			Other (specify source)	Marketable Securities \$	Other (specify)	Marketable Securities \$
Stocks/Bonds			\$	Other Liquid Assets \$	\$	Other Liquid Assets \$
Commodities			Total Annual Income \$	Real Estate \$ <small>(exclusive of family residence)</small>	Total Annual Income \$	Real Estate \$
Other (specify)				Other (specify)		Other (specify)
				\$		\$
				Total Net Worth \$		Total Net Worth \$

IV. SIGNATURE

TO FINANCIAL ORGANIZATION AND PERSHING: In order to induce you to open or continue to maintain accounts for the undersigned for transactions in option contracts, however designated, including, without limitation, purchase, sale, transfer, exercise, and endorsement ("Option Transaction"), the undersigned ("Client") hereby warrants and represents that the above information is true and correct and agrees with you as set forth on the reverse side hereof.

SPECIAL NOTE FOR NON-U.S. ACCOUNTS: With respect to assets custodied by Pershing on your behalf, you acknowledge that income and capital gains or distributions to you from this account may be taxable in your home jurisdiction. You acknowledge to your financial organization and to Pershing that you have taken your own tax advice in this regard.

I UNDERSTAND THAT THIS AGREEMENT CONTAINS A PREDISPUTE ARBITRATION CLAUSE, WHICH IS LOCATED IN PARAGRAPHS 14 AND 15 ON PAGE 3 IN THIS AGREEMENT.

AFFIX
CORPORATE
SEAL IF
APPLICABLE

<input type="checkbox"/> FOR INDIVIDUAL AND JOINT ACCOUNTS ACCOUNT OWNER'S SIGNATURE: _____ DATE: _____ CO-TENANT'S SIGNATURE (if joint account): _____ DATE: _____	<input type="checkbox"/> FOR CORPORATIONS, PARTNERSHIPS, TRUSTS, OR ESTATES SIGNATURE OF GENERAL PARTNER OR TRUSTEE: _____ DATE: _____ SIGNATURE OF CORPORATE SECRETARY, GENERAL PARTNER, OR TRUSTEE: _____ DATE: _____
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PLEASE DO NOT WRITE IN THIS SPACE—FOR FINANCIAL ORGANIZATION USE ONLY			
PRODUCT APPROVALS: <input type="checkbox"/> STOCK OPTIONS <input type="checkbox"/> INDEX OPTIONS <input type="checkbox"/> DEBT INSTRUMENT OPTIONS <input type="checkbox"/> FOREIGN CURRENCY OPTIONS		INDIVIDUAL AND JOINT ACCOUNTS ONLY Number of Calls _____ Number of Puts _____ Total Limit _____	
TYPE OF OPTION TRADING: <input type="checkbox"/> COVERED WRITING <input type="checkbox"/> BUYING <input type="checkbox"/> SPREADING <input type="checkbox"/> UNCOVERED WRITING		DOLLAR LIMIT \$ _____ CONTRACT LIMIT: _____	
ROUTING:	Initials	Date	APPROVALS: I have reviewed the information herein concerning the client's investment objective(s), investment experience, and financial condition. INVESTMENT PROFESSIONAL: _____ DATE: _____ BRANCH MANAGER: _____ DATE: _____ REGISTERED OPTIONS PRINCIPAL: _____ DATE: _____ OPTION DISCLOSURE MAILED TO CLIENT: <input type="checkbox"/> YES <input type="checkbox"/> NO DATE MAILED: _____
A/C CONTROL			
COMPLIANCE			
CUST. FILES			



V. OPTION AGREEMENT

Meaning of terms in the Agreement: "Client" refers to the person(s) who signed this Option Agreement and Approval Form. "Pershing" refers to Pershing LLC. "Financial Organization" refers to the broker, bank, or other financial organization that has introduced my (our) account to Pershing. The word "you" refers to Pershing and/or the Financial Organization, as appropriate.

1. The Client acknowledges receipt of the notice pursuant to Financial Industry Regulatory Authority (FINRA) Rule 4311(d), which explains the contractual relationship between Pershing and the Financial Organization. The Client understands that this notice also appears on each of the Client's account statements. The Client understands that the Financial Organization is not acting as the agent of Pershing. The Client understands that Pershing merely accepts from the Financial Organization orders for the purchase and sale of securities and instructions relating to other property in the Client's account and that Pershing is not in a position, nor undertakes any responsibility, to give advice, make suitability determinations, supervise, or oversee the Financial Organization's handling of the responsibilities undertaken by the Financial Organization pursuant to any agreement the Client may have with the Financial Organization.
2. The Client understands and is well aware that option trading may be highly speculative in nature. The Client is also aware that on certain days, option trading may cease and this could result in a financial loss to the Client. The Client agrees to hold you harmless for such loss.
3. The Client recognizes that by writing or selling an option contract (such as a call, put, or straddle) without depositing the underlying security, the Client's risk of loss is potentially unlimited. The Client agrees to honor all assignments and to deliver the underlying security or the required funds in the prescribed time to you, and upon the Client's failure to do so in the proper time, you are hereby authorized to act as agent for the Client and to buy in, or, sell out such securities at the current market price or otherwise act to properly margin or complete the Client's obligation. The Client agrees to pay you a commission and fee for such service and to reimburse you for any loss incurred in connection therewith, and you are authorized to debit the Client's account for all such amounts.
4. The Client agrees that the Client is responsible for making all final decisions as to transactions effected in any account of the Client at your firm. The Client understands that each order the Client enters (to buy or to sell) must be complete as to security, quantity, price, and duration of the order.
5. The Client is willing and able to assume the financial risks and hazards of option trading, and the Client agrees that the Client will in no way hold Pershing responsible for such losses whether incurred through following the Financial Organization's trading recommendations or suggestions offered to the Client in good faith by the Financial Organization or through the Client's own decisions however arrived at by the Client.
6. The Client understands that any Option Transaction made for any account of the Client is subject to the rules, regulations, customs, and usages of The Options Clearing Corporation (OCC) and of the registered national securities exchange, national securities association, clearing organization, or market where such transaction was executed. The Client agrees to abide by such rules, regulations, and usages and the Client agrees that, acting individually or in concert with others, the Client will not exceed any applicable position or exercise limits imposed by such exchange, association, clearing organization, or other market with respect to option trading.
7. If the Client does not satisfy, on a timely basis, your money or security calls, you are authorized in your sole discretion, and without notification, to take any and all steps you deem necessary to protect yourself (for any reason) in connection with options transactions for the Client's account, including the right to buy and/or sell (including short or short exempt) for the Client's account and risk any part or all of the shares represented by options handled, purchased, sold, and/or endorsed by you for the Client's account or to buy for the Client's account and risk any option as you may deem necessary or appropriate. Any and all expenses or losses incurred in this connection will be reimbursed by the Client.
8. The Client bears full responsibility for taking action to exercise an option contract; provided, however, that with respect to certain expiring options, you are authorized to permit exercise by exception to take place automatically pursuant to the rules of the OCC as in effect from time to time unless the Client specifically advises you to the contrary in writing. This procedure affects options that are in the money by a predetermined amount as set forth in the rules of the OCC. Additional information regarding this procedure is available upon your written request.
9. In addition to the terms and conditions hereof, the Client's options account will be subject to all of the terms and conditions of all other agreements heretofore or hereafter at any time entered into with you relating to the purchase and sale of securities except to the extent that such other agreements are contrary to or inconsistent herewith.
10. This agreement shall apply to all puts or calls that you may have executed, purchased, sold, or handled for any account of the Client and also shall apply to all puts or calls that you may hereafter purchase, sell, handle, or execute for any account of the Client.
11. The Client agrees to advise the Financial Organization of any changes in the Client's financial situation or investment objective insofar as the Client deems such changes material to the Client's options transactions.
12. The Client has received from the Financial Organization the most recent Options Disclosure Document and Definitive Supplement. The Client has read and understands the information contained in these documents.
13. The Client understands that you assign exercise notices on a random basis. The Client understands that upon the Client's request, you will provide the Client with further information regarding the procedure used to assign exercise notices. The random selection method utilized by Pershing is automated in so far as a random four-digit number is manually entered into a system, which uses an algorithm detailed below to derive the allocation of the assignment. A report is then generated listing the accounts to be assigned and the number of contracts assigned per affected account. In the event that a manual assignment allocation must be performed due to a system failure, the manual allocation follows the same logic as the automated method.

14. ARBITRATION DISCLOSURES:

THIS AGREEMENT CONTAINS A PREDISPUTE 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.**

15. ARBITRATION AGREEMENT:

ANY CONTROVERSY BETWEEN YOU AND US SHALL BE SUBMITTED TO ARBITRATION BEFORE FINRA.

NO PERSON SHALL BRING A PUTATIVE OR CERTIFIED CLASS ACTION TO ARBITRATION, NOR SEEK TO ENFORCE ANY PREDISPUTE 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; (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.

THE LAWS OF THE STATE OF NEW YORK GOVERN.