



Customer Relationship Summary

1. Introduction

Firsttrade Securities Inc. (“Firsttrade” or “We”) is registered with the Securities and Exchange Commission (SEC) as a broker-dealer and is a member of the Financial Industry Regulatory Authority (FINRA) and the Securities Investor Protection Corporation (SIPC). Brokerage and investment advisory services and fees differ, and it is important for you to understand these differences. Free and simple tools are available to research firms and financial professionals at Investor.gov/CRS, which also provides educational materials about broker-dealers, investment advisers, and investing.

What investment services and advice can you provide me?

2. Relationships and Services

Firsttrade is an online discount broker-dealer that provides self-directed brokerage services and a complete suite of investment products. Firsttrade **does not** provide investment advice or make recommendations to you on what type of account to open. You decide the type of account, type of investment, and when to purchase or sell an investment. Apex Clearing Corporation is the clearing firm that carries your account.

- We provide self-directed investors with an online and mobile trading platform. The ultimate decision as to your investment strategy and the purchase or sale of investments will be yours.
- The investment products that we provide to you are stocks, Fixed Income Securities, CDs, mutual funds, index funds, Exchange Traded Funds (ETFs), options, margin investing, Dividend Reinvestment Plans (DRIP’s) and Securities Lending Income Programs.
- Fractional share trading executed by Apex Clearing marked as Principal Trades. Please see [disclosure](#).
- We do not monitor the performance of your account. We do check your account for other purposes such as compliance and to ensure your account does not present undue risk to Firsttrade.

Additional Information:	Please visit our website (www.firsttrade.com) for more detailed information about our broker-dealer products and services.
Conversation Starter:	• <i>Given my financial situation, should I choose a brokerage service? Why or why not?</i>

What fee will I pay?

3. Fees, Costs, Conflicts and Standard of Conduct

- **Commissions:** Commissions are transaction-based fees charged by brokers. We currently offer \$0 transaction fees (commissions) for **online orders** when you buy or sell a stock, mutual fund, index fund, exchange traded fund or option. There is a fee on **phone orders**: Stocks/ETFs - \$19.95; Options - \$19.95+\$0.50/contract; Load Funds - No Charge; No-Load Funds - \$19.95, which is subtracted from your investment amount at the time of purchase. A Short-Term Redemption Fee of \$19.95 will be applied to redemptions of mutual fund shares held less than 90 days. Please see our fee schedule at firsttrade.com/pricing.
- **Exchange, Regulatory, and Clearing Fees:** Exchanges, clearing houses and regulators may charge Firsttrade fees. These fees may be charged to your account depending on the products you trade.
- **Account Maintenance Fees:** There are no account maintenance or inactivity fees.
- **Subscription Service Fees:** You have free access to the third-party research tool. Financial customers may elect to access market data or other services with a monthly fee.
- **Interest and Financial Costs:** If you borrow on margin or borrow stock for short selling, the margin interest and stock borrow fee will apply to your account, please see our rate chart at firsttrade.com/pricing/marginrate.
- **Description of Other Fees and Costs:**

- Mutual funds, index funds and exchange traded funds may impose internal fees and expenses, which will reduce the amount of your investment.
- Bonds and CDs have mark-ups or mark-downs which are costs included in the price you pay for the investment.
- We deliver monthly/quarterly account statements to you electronically or in paper format as instructed by you. If the electronic delivery registration fails an extra mailing fee will apply.
- A standard industry transfer fee will be charged for conducting a complete or partial account transfer to another firm.

Additional Information:	You will pay any applicable fees and costs whether you make or lose money on your investments. Fees and costs will reduce any amount of money you make on your investments over time. Please make sure you understand what fees and costs you are paying.
Conversation Starter:	• <i>Help me understand how these fees and costs might affect my investments. If I give you \$10,000 to invest, how much will go to fees and costs, and how much will be invested for me?</i>

What are your legal obligations to me when providing recommendations? How does your firm make money and what conflicts of interest do you have?

We **do not** provide recommendations. The way we make money creates some conflicts with your interests. You should understand and ask us about these conflicts because they can affect the services, we provide you. Here are some examples to help you understand what this means.

- We do not receive any incentives on any investments that you make.
- We do not conduct proprietary trading against customer accounts.
- We receive third-party payments, such as 12b-1 fees from mutual fund companies.
- We share interest revenue from the clearing firm on customer credit and margin balances.
- We receive payment for order flow and securities lending from the clearing firm and market makers, and other third parties through whom Firstrate executes customer orders.

Additional Information:	We mitigate potential conflicts of interest by not providing recommendations as to what investment products to purchase, sell or hold. We prohibit our employees from recommending investments or providing investment, financial, legal or tax advice to retail investors.
Conversation Starter:	• <i>How might your conflicts of interest affect me, and how will you address them?</i>

How do your financial professionals make money?

Our financial professionals are paid a fixed base salary and merit-based discretionary bonuses. The bonus component is calculated based on factors including company and individual performance and may include cash and non-cash compensation. They **do not** receive product sales commissions or revenue from advisory services or recommendations.

Do you or your financial professionals have legal or disciplinary history?

4. Disciplinary History

Yes. Visit [Investor.gov/CRS](https://investor.gov/CRS) for a free and simple search tool to research us and our financial professionals. Firstrate is regulated by the U.S. SEC, FINRA, each of the U.S. stock exchanges and option exchanges, each U.S. state securities regulator. Please go to brokercheck.finra.org for additional information.

5. Additional Information

You can find additional information about our services on our web site (www.firstrate.com). We are a broker-dealer rather than an investment advisory firm. We do not assign registered representatives to manage client accounts. If you have any concerns regarding the service that you receive or request a copy of the *relationship summary*, you can contact us by email at service@firstrate.com, or calling us at 800-869-8800.

Conversation Starter:	• <i>Who is my primary contact person? Is he or she a representative of an investment adviser or a broker-dealer? Who can I talk to if I have concerns about how this person is treating me?</i>
-----------------------	--



30-50 Whitestone Expressway
 Ste. A301, Flushing, NY 11354
 Client Services: (800) 869-8800
 From Overseas: (718) 961-6600

BRANCH-ACCOUNT NO.

REGISTERED REP CODE

NEW ACCOUNT APPLICATION & AGREEMENT

I (We) would like to open a brokerage account with you ("my Broker").
 I (We) understand you have designated Apex Clearing Corporation ("Clearing Firm") as your clearing firm.

ACCOUNT INFORMATION ALL INFORMATION MUST BE COMPLETED. PLEASE TYPE OR PRINT.

ACCOUNT TYPE	CASH – <i>Customer Account Agreement follows this Application</i>		
	OPTIONS – <i>Request Option Agreement</i>		
	MARGIN – <i>Request Margin Agreement</i>		
CUSTOMER TYPE	Individual	Estate – <i>Furnish Court Appointment</i>	
	Joint – <i>Request Joint Account Agreement</i>	Sole Proprietorship – <i>Request Form</i>	
	Trust – <i>Trustee Certification Required</i>	UTMA – <i>Indicate State Code:</i>	
	Other: _____	UGMA – <i>Indicate State Code:</i>	
	<i>To be answered if the account holder is a Broker or Dealer (which includes a Foreign Broker or Dealer, or a Foreign Bank acting as a Broker or Dealer)</i> Is this account a PAB account; a proprietary account of a Broker or Dealer as defined by SEC 15c3-3(a)(16)? <i>Selection required</i> <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, complete a "New Account Form for Proprietary Account Broker (PAB)" form AND a "New Account Application Entity" form. The New Account Form is not sufficient to open a PAB account.		
ACCOUNT INFORMATION	PRIMARY APPLICANT NAME (<i>Or NAME OF MINOR if Custodial Account</i>)		DATE OF BIRTH
	U.S. CITIZEN <input type="checkbox"/> YES <input type="checkbox"/> NO	IF NO, WHAT COUNTRY?	
	SOCIAL SECURITY NUMBER/ITIN	FTIN (<i>Required for Foreign Persons</i>)	COUNTRY OF ISSUE
	HOME ADDRESS (<i>Cannot be a Post Office Box</i>)		
	CITY	STATE/COUNTRY	ZIP CODE
	E-MAIL ADDRESS	CELL PHONE/HOME PHONE	BUSINESS PHONE
	MARITAL STATUS (<i>Select One</i>) <input type="checkbox"/> SINGLE (S) <input type="checkbox"/> MARRIED (M) <input type="checkbox"/> DIVORCED (D) <input type="checkbox"/> WIDOWED (W)		NUMBER OF DEPENDENTS
	EMPLOYER	YEARS EMPLOYED	POSITION
	BUSINESS ADDRESS		
	CITY	STATE/COUNTRY	ZIP CODE
	MAIL TO (<i>Select One</i>) <input type="checkbox"/> Business Address <input type="checkbox"/> Mailing Address <input type="checkbox"/> Post Office Box		
	MAILING ADDRESS		
	CITY	STATE/COUNTRY	ZIP CODE

ACCOUNT INFORMATION <i>(continued)</i>	Is the Primary Account Holder a Control Person of a publicly traded company? (Director, Officer, or 10% Stockholder) <input type="checkbox"/> Yes <input type="checkbox"/> No If YES: Provide the name of the company(s) and the stock ticker symbol(s) below. I/We promise to notify you of any changes. Company(s)/Ticker Symbol(s): _____			
	Is the Primary Account Holder an employee of, or affiliated with, the Introducing Broker firm? If NO: Is the Primary Account Holder affiliated with, work with, or work for another member firm of a Stock Exchange or FINRA? If YES: Provide the name of Firm: _____			<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No
	JOINT APPLICANT NAME (<i>Executor, Trustee, Custodian</i>)		DATE OF BIRTH	
	U.S. CITIZEN <input type="checkbox"/> YES <input type="checkbox"/> NO	IF NO, WHAT COUNTRY?		
	SOCIAL SECURITY NUMBER/ITIN /ITIN	FTIN (<i>Required for Foreign Persons</i>)	COUNTRY OF ISSUE	
	JOINT APPLICANT HOME ADDRESS (<i>Cannot be a Post Office Box</i>)			
	CITY	STATE/COUNTRY		ZIP CODE
	E-MAIL ADDRESS		CELL PHONE/HOME PHONE	BUSINESS PHONE
	JOINT APPLICANT MARITAL STATUS (<i>Select One</i>) <input type="checkbox"/> SINGLE (S) <input type="checkbox"/> MARRIED (M) <input type="checkbox"/> DIVORCED (D) <input type="checkbox"/> WIDOWED (W)			NUMBER OF DEPENDENTS
	JOINT APPLICANT EMPLOYER		YEARS EMPLOYED	POSITION
	BUSINESS ADDRESS			
	CITY	STATE/COUNTRY		ZIP CODE
	Is the Joint Account Holder a Control Person of a publicly traded company? (Director, Officer, or 25% Stockholder) <input type="checkbox"/> Yes <input type="checkbox"/> No If YES: Provide the name of the company(s) and the stock ticker symbol(s) below. I/We promise to notify you of any changes. Company(s)/Ticker Symbol(s): _____			
	Is the Joint Account Holder an employee of, or affiliated with, the Introducing Broker firm? If NO: Is the Joint Account Holder affiliated with, work with, or work for another member firm of a Stock Exchange or FINRA? If YES: Provide the name of Firm: _____			<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No
	TRADING AUTHORIZATION TO ANOTHER PARTY Request the Trading Authorization Form from your introducing broker-dealer to grant trading authority to a third party.			
GOVERNMENT IDENTIFICATION	PRIMARY APPLICANT - TYPE OF IDENTIFICATION Attach a color copy of the photo identification <input type="checkbox"/> Driver's License <input type="checkbox"/> INS Permanent Resident Alien Card <input type="checkbox"/> Passport <input type="checkbox"/> Foreign National Identification Document <input type="checkbox"/> Other: _____			
	IDENTIFICATION NUMBER	STATE/COUNTRY OF ISSUANCE	ISSUE DATE	EXPIRATION DATE

GOVERNMENT IDENTIFICATION <i>(continued)</i>	JOINT APPLICANT <i>(Executor, Trustee, Custodian)</i> - TYPE OF IDENTIFICATION				
	Attach a color copy of the photo identification				
<input type="checkbox"/> Driver's License		<input type="checkbox"/> INS Permanent Resident Alien Card			
<input type="checkbox"/> Passport		<input type="checkbox"/> Foreign National Identification Document			
<input type="checkbox"/> Other: _____					
IDENTIFICATION NUMBER	STATE/COUNTRY OF ISSUANCE	ISSUE DATE	EXPIRATION DATE		
TRUSTED CONTACT <i>For additional information, see Section 19 of the Customer Agreement</i>	NAME		HOME TELEPHONE	E-MAIL ADDRESS	
	MAILING ADDRESS				
	CITY		STATE/COUNTRY	ZIP CODE	
INITIAL SOURCE OF FUNDS <i>Check all that apply</i>	Salary/Wages/Savings		Sale of Property or Business		
	Employer-Sponsored Plan Rollover		Gifts		
	Pension or Other Retirement Savings		Family/Relatives/Inheritance		
	Social Security Benefits		Other:		
INVESTMENT PROFILE	TIME HORIZON <i>Number of years to achieve a particular financial goal</i>		LIQUIDITY NEEDS <i>The ability to quickly and easily convert all or a portion of the account assets into cash without experiencing significant loss</i>		
	Short <i>(Less than 3 years)</i> (01)		Very Important (01)		
	Average <i>(4 to 7 years)</i> (02)		Somewhat Important (02)		
	Longest <i>(8+ years)</i> (03)		Not Important (03)		
	INVESTMENT OBJECTIVE	INVESTMENT EXPERIENCE		RISK TOLERANCE	
	Capital Preservation (05)	None (00)		Low (01)	
	Income (04)	Limited (01)		Medium (02)	
	Growth & Income (02)	Good (02)		High (03)	
	Growth (03)	Extensive (03)		Tax Bracket: _____ %	
	Speculation (06)				
	LIQUID NET WORTH <i>Cash and Liquid Investments Only</i>	TOTAL NET WORTH <i>Excluding residence</i>		ANNUAL INCOME <i>From all sources</i>	
Under \$50,000 (01)	Under \$50,000 (01)		Under \$25,000 (01)		
\$50,001 to \$100,000 (02)	\$50,001 to \$100,000 (02)		\$25,001 to \$50,000 (02)		
\$100,001 to \$200,000 (22)	\$100,001 to \$200,000 (22)		\$50,001 to \$100,000 (03)		
\$200,001 to \$500,000 (23)	\$200,001 to \$500,000 (23)		\$100,001 to \$200,000 (23)		
\$500,001 to \$1,000,000 (24)	\$500,001 to \$1,000,000 (24)		\$200,001 to \$300,000 (24)		
\$1,000,001 to \$5,000,000 (25)	\$1,000,001 to \$5,000,000 (25)		\$300,001 to \$500,000 (25)		
Over \$5,000,001 (26)	Over \$5,000,001 (26)		\$500,001 to \$1,200,000 (26)		
			Over \$1,200,001 (27)		

LARGE TRADER ID*	LARGE TRADER ID ("LTID") <i>If you have an SEC assigned LTID for any of your accounts, provide the ID(s)</i>		EFFECTIVE DATE
	END DATE	END REASON <input type="checkbox"/> Correction <input type="checkbox"/> Ended <input type="checkbox"/> Replaced <input type="checkbox"/> Other: _____	
	* Additional LTIDs may be added in the section "FOR OFFICE USE ONLY" below		
DIVIDEND REINVESTMENT	FREE DIVIDEND REINVESTMENT		
	Select whether or not you would like to have your dividends reinvested on all eligible securities. You can always change your selection by calling your investment representative.		
	Select ONE: <input type="checkbox"/> YES, Reinvest dividends on ALL eligible securities <input type="checkbox"/> NO, Do not reinvest any dividends		
E-DELIVERY ELECTION	E-DOCUMENTS ENROLLMENT		
	When you enroll your account in E-Docs, you will receive trade confirmations, account statements, tax-related documents, proxies, prospectuses, annual reports, and all other eligible account documents electronically. An e-mail notification will be sent to the Account Owner's e-mail address on the same day that any electronic documents become available. Just log into your account to access E-Docs and view, print, or download your electronic documents. Please speak with your investment representative for enrollment information.		
SERVICE INSTRUCTIONS <i>Voluntary Sweep Program</i>	By opening your account and/or selecting yes below, you agree to enroll in the Apex Clearing Corporation Sweep Program (the "Sweep Program") and agree that you have read and understand the terms and conditions of the Sweep Program. The Sweep Program terms and conditions and the list of banks participating and/or products available in the Sweep Program can be located at ApexClearing.com/disclosures. Free credit balances in the account, including dividends and proceeds from the sale of securities that are credited to the account while enrolled in the Sweep Program, may automatically be swept in accordance with the terms of the Sweep Program. Further, you agree Apex Clearing Corporation may make changes to the Sweep Program terms and conditions or any products or banks in the Sweep Program at any time in Apex's sole discretion. Your enrollment in the Sweep Program does not guarantee free credit balances in your account will be swept. If you wish to opt out of the Sweep Program you may select "No" in this Section or you may notify your introducing firm at any time. <input type="checkbox"/> Yes <input type="checkbox"/> No		
DIRECT COMMUNICATION RULE <i>Rule 14b-1(c)</i>	Rule 14b-1(c) of the Securities Exchange Act, unless you object, requires us to disclose to an issuer, upon its request, the names, addresses, and securities positions of our customers who are beneficial owners of the issuer's securities, held by us in nominee name. The issuer would be permitted to use your name and other related information for corporation communication only. If you object to this disclosure, check the box below. <input type="checkbox"/> YES, I object to the disclosure of such information.		
ADDITIONAL ACCOUNT INFORMATION	IS THE ACCOUNT MAINTAINED FOR A CURRENT OR FORMER POLITICALLY EXPOSED PERSON OR PUBLIC OFFICIAL? <i>(Includes U.S. & Foreign Individuals)</i> <input type="checkbox"/> Yes <input type="checkbox"/> No		
	If YES: Provide the name(s) of the Official and the Official's immediate family members <i>(including former spouses)</i> and the name of the related political organization.	NAME OF OFFICAL AND IMMEDIATE FAMILY MEMBER(S)	
		NAME(S) OF OFFICIAL'S IMMEDIATE FAMILY MEMBER(S)	
		RELATED POLITICAL ORGANIZATION	
	IS THE ACCOUNT MAINTAINED FOR A FOREIGN FINANCIAL INSTITUTION AS DEFINED BY TITLE 31 OF THE CODE OF FEDERAL REGULATIONS? <input type="checkbox"/> Yes <input type="checkbox"/> No <i>If Yes, complete the form "Foreign Financial Institution Due Diligence Questionnaire"</i>		
IS THE ACCOUNT A FOREIGN BANK ORGANIZED UNDER FOREIGN LAW AND LOCATED OUTSIDE OF THE UNITED STATES AS DEFINED BY TITLE 31 OF THE CODE OF FEDERAL REGULATIONS? <input type="checkbox"/> Yes <input type="checkbox"/> No If YES, provide U.S. Agent for Service of Process: _____ <i>If YES, complete the form "Certification Regarding Correspondent Accounts" in addition to the form "Foreign Financial Institution Due Diligence Questionnaire"</i> NOTE: Broker-Dealers are prohibited from establishing, maintaining, administering, or managing correspondent accounts in the United States for Foreign Shell Banks. The prohibition does not include Foreign Shell Banks that are regulated affiliates.			

TAX CERTIFICATION	FORM W-9 Under penalties of perjury, I certify that: (1) The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me), and (2) I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding, and (3) I am a U.S. citizen or other U.S. person (defined below), and (4) the FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.	
	<input type="checkbox"/> I am subject to withholding. Item 2 (above) is not applicable to me.	
	Definition of a U.S. person. For federal tax return purposes, you are considered a U.S. person if you are: An individual who is a U.S. citizen or U.S. resident alien, A partnership, corporation, company, or association created or organized in the United States or under the laws of the United States, an estate (other than a foreign estate), or a domestic trust (as defined in Regulations section 301.7701-7). The Internal Revenue Service does not require your consent to any provisions of this document other than the certifications required to avoid backup withholding.	
	See instructions for a list of Exceptions	
	EXEMPT PAYEE CODE <i>(if any)</i>	EXEMPTION FROM FATCA REPORTING CODE <i>(if any)</i>
	FORM W-8 Complete Form W-8 if you are a foreign person or business entity.	
SIGNATURES	I authorize my broker and/or Clearing Firm to obtain a consumer report at the time of application to verify my creditworthiness and to obtain a consumer report from time to time for updates, renewals, extensions, and collection activity on any approved account. Upon my written request, my broker and/or Clearing Firm will disclose to me whether it obtained a report, and if so, the name and address of the consumer-reporting agency that provided it. In the event that my account is denied by Clearing Firm, as a result of the consumer report verification, I authorize Clearing Firm to provide to my broker the reason(s) for such denial.	
	BY SIGNING THIS APPLICATION, I (WE) ACKNOWLEDGE THE FOLLOWING (1) THAT PARAGRAPH 8 OF THE CUSTOMER ACCOUNT 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 CUSTOMER ACCOUNT AGREEMENT FOLLOWING THIS APPLICATION AND MY (OUR) AGREEMENT WITH THE TERMS THEREIN AND (3) THE INFORMATION PROVIDED ABOVE IS ACCURATE.	
	SIGNATURE	DATE
	SIGNATURE – JOINT APPLICANT <i>(Executor, Trustee, Custodian)*</i>	DATE

* For Joint Accounts, BOTH parties must sign

FOR OFFICE USE ONLY			
CUSTOMER ID VERIFICATION	CUSTOMER IDENTIFICATION VERIFIED <i>Must be completed</i>		<input type="checkbox"/> YES
SIGNATURES	BRANCH MANAGER APPROVAL SIGNATURE	BRANCH MANAGER NAME	DATE
	REPRESENTATIVE SIGNATURE	REPRESENTATIVE NAME	DATE
CAT FDID	CAT FDID <i>By default, the FDID will be assigned at account opening. Any updates to this field post account opening will be reported as FDID replacement values</i>		CAT FDID
LTID	LTID		EFFECTIVE DATE
	END DATE	END REASON <input type="checkbox"/> Correction <input type="checkbox"/> Ended <input type="checkbox"/> Replaced <input type="checkbox"/> Other: _____	
	LTID		EFFECTIVE DATE
	END DATE	END REASON <input type="checkbox"/> Correction <input type="checkbox"/> Ended <input type="checkbox"/> Replaced <input type="checkbox"/> Other: _____	
	LTID		EFFECTIVE DATE
	END DATE	END REASON <input type="checkbox"/> Correction <input type="checkbox"/> Ended <input type="checkbox"/> Replaced <input type="checkbox"/> Other: _____	
	LTID		EFFECTIVE DATE
	END DATE	END REASON <input type="checkbox"/> Correction <input type="checkbox"/> Ended <input type="checkbox"/> Replaced <input type="checkbox"/> Other: _____	
	LTID		EFFECTIVE DATE
	END DATE	END REASON <input type="checkbox"/> Correction <input type="checkbox"/> Ended <input type="checkbox"/> Replaced <input type="checkbox"/> Other: _____	
CAT AND OATS ACCOUNT TYPES	CAT ACCOUNT TYPE <i>(Selection Required)</i>	OATS ACCOUNT TYPE	
	CAT ACCOUNT TYPES: A: Institutional Customer - An institutional account as defined in FINRA Rule 4512(c) E: Employee Account - An employee or associated person of your Broker-Dealer F: Foreign - A non-broker-dealer foreign affiliate or non-reporting Foreign Broker-Dealer I: Individual Customer - An account that does not meet the definition of FINRA Rule 4512(c) and is also not a proprietary account. O: Market Making - See CAT FAQ C5 V: Firm Agency Average Price Account P: Other Proprietary X: Error Account - Error account of the firm	OATS ACCOUNT TYPES: A: Institutional Customer - An institutional account as defined in FINRA Rule 4512(c) C: Combined - An order representing more than one type of account E: Employee Account - An employee or associated person of your Broker-Dealer. I: Individual Customer - An account that does not meet the definition of FINRA Rule 4512(c) and is also not a proprietary account. O: Market Making P: Other Proprietary X: Error Account - Error account of the firm.	



30-50 Whitestone Expressway
Ste. A301, Flushing, NY 11354
Client Services: (800) 869-8800
From Overseas: (718) 961-6600

JOINT ACCOUNT AGREEMENT: (Rights of Survivorship)

Account Number: _____

In consideration of your establishing a joint account for the undersigned, the undersigned agree that each of them shall have the authority on behalf of the joint account to buy, sell (including short sales) and otherwise deal in, through you as broker, stocks, bonds and other securities and commodities, on margin or otherwise, to receive on behalf of the joint account demands, notices, confirmations, reports, statements of account and communications of every kind; to receive on behalf of the joint account money, securities and property of every kind and to dispose of the same; to make on behalf of the joint account agreements relating to any of the foregoing matters and to terminate or modify same or waive any of the provisions thereof and generally to deal with you or Apex Clearing Corporation on behalf of the joint account as fully and completely as if he alone were interested in said account. You are authorized to follow the instructions of any of the undersigned in every respect concerning the said joint account and to make deliveries to any of the undersigned, or upon his order, of any or all monies at any time or from time to time in the said joint account as he may order and direct, even if such deliveries and/or payments shall be made to him personally, and not for the joint account of the undersigned. Notwithstanding the foregoing, you reserve the right to insist upon written instructions bearing signatures of all parties to the account when such instructions effect change of ownership of monies and/or securities. In the event of any deliveries of securities or payments of monies to any of the undersigned as aforesaid, you shall be under no duty or obligation to inquire into the purpose or propriety of any such demand for delivery of securities or payment of monies, and you shall not be bound to see the application or disposition of the said securities and/or monies so delivered or paid to any of the undersigned or upon his order. The authority hereby conferred shall remain in force until written notice of the revocation addressed to you is received by your firm.

The liability of the undersigned with respect to said account shall be joint and several. The undersigned further agrees that all property that you may at any time be holding or carrying for any one or more of the undersigned shall be subject to a lien in favor of you for the discharge of the obligations of the joint account to you, such lien to be in addition to and not in substitution of the right and remedies you otherwise would have.

It is further agreed that in the event of the death of either or any of the undersigned, the survivor or survivors shall immediately give you written notice thereof, and you may before or after receiving such notice, take such proceeding, require such papers and inheritance or estate tax waivers, retain such portion of and/or restrict transactions in the account as you may deem advisable to protect against any tax, liability, penalty or loss under any present or future laws or otherwise. The estate of any of the undersigned who shall have died shall be liable and each survivor shall continue liable jointly and severally, to you for any net debit balance or loss in said account in any way resulting from the completion of transactions initiated prior to the receipt of the written notice of the death of decedent or incurred in the liquidation of the account or the adjustment of the interests of the respective parties.

It is the express intention of the undersigned to create an estate or account as joint tenants with right of survivorship and not as tenants in common. In the event of the death of either of the undersigned, the entire interest in the joint account shall be vested in the survivor or survivors on the same terms and conditions as theretofore held, without in any manner releasing the decedent's estate from the liability provided for in the next preceding paragraph.

I understand that you have entered into a fully disclosed clearing agreement with Apex Clearing Corporation ("Clearing Firm") pursuant to which Clearing Firm may perform certain transaction processing, clearing, custodial, and financing functions for you with respect to the Account. I understand that Clearing Firm does not control, audit, or otherwise supervise your activities, does not verify information I provide to you regarding the Account or transactions processed for the Account, and does not undertake responsibility for reviewing the appropriateness of transactions entered by you on my behalf. I agree that you are not an agent of Clearing Firm, that Clearing Firm is not your agent, and that I will in no way hold Clearing Firm, or its officers, directors, employees and agents liable for any trading losses that I may incur. I agree that Clearing Firm is a beneficiary of my representations, warranties, acknowledgments, and covenants in this agreement (including, without limitation, my authorizations, indemnifications, waivers, and releases) to the same extent as if they were made directly by me to Clearing Firm. And I agree that Clearing Firm, in its own name and for its own benefit, shall be entitled to exercise and enforce directly against me such provisions and all other rights granted to you.

JOINT ACCOUNT AGREEMENT:

(Rights of Survivorship)

Subject to the provisions hereof, all notices or communications for the undersigned in respect of the joint account are to be directed to the primary joint account holder:

Name					
Address					
City		State		Zip Code	

Each of the undersigned has signed the Customer Account Agreement and if applicable, a Margin Agreement (including a stock lending agreement) which are intended to cover, in addition to the provisions hereof, the terms governing the joint account.

Very truly yours,

Primary Joint Account Holder's Signature

Date

Primary Joint Account Holder's Printed Name



Firsttrade Account Agreement

Member FINRA & SIPC

1. General Information

This form contains important Information about your Firsttrade Securities Inc. (“Firsttrade”) brokerage account which is carried by Apex Clearing Corporation (“Apex”) and contains terms and conditions you agreed to by signing the brokerage account application, margin agreement (if applicable) and option agreement (if applicable). Subsequent to the approval of your Firsttrade Cash Account, you may elect to establish a Margin Account and/or Option Account. This information applies to all of your accounts with Firsttrade, including cash, margin and option accounts. Upon approval, Firsttrade will act as your broker for the purpose of transacting buy and/or sell orders for securities as instructed by you. You agree that Firsttrade has no obligation to advise you on the suitability of any security, transaction or investment strategy and you acknowledge that you are responsible for monitoring profits and losses in your account. You agree that Firsttrade does not provide legal or tax advice or advice regarding specific equities or listed options, including suitability and investment strategies. You agree that you are fully responsible for evaluating your personal financial circumstances and for determining your suitability for any particular security, transaction or investment strategy. You further agree that you have read the entire Firsttrade and Apex Account Agreements and agree to all terms and conditions in these Agreements. For our protection against credit risks and other conditions, we may, without prior notice, decline to accept your orders or instructions or we may place restrictions on your account. You acknowledge that any order you place which Firsttrade, in its sole discretion, deems to be disruptive to the securities markets, unusual in size, type or credit risk or which exceeds Firsttrade's usual authorized limits may be subject to rejection, cancellation or modification. You acknowledge that market orders cannot always be canceled, because they are subject to immediate execution and the order may be executed before the request for cancellation is received by Firsttrade. All transactions will be subject to the applicable rules, regulations, customs and usages of any exchange or market where executed clearinghouse or self-regulatory organization and to all applicable federal and state laws, rules and regulations.

2. Customer Identification

To help the government fight the funding of terrorism and money laundering activities, Federal law requires all financial institutions to obtain, verify, and record information that identifies each person who opens an account. What this means for you: When you open an account, we will ask for your name, address, date of birth and other information that will allow us to identify you. We may also ask to see your driver's license or other identifying documents.

You (“the customer”) are attest that you are of majority age. The Customer represents either that the Customer 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, or alternatively, that the Customer has obtained and

will provide to Firstrade additional documentation which may include information required under FINRA Rule 3210 from its employer authorizing the Customer to open and maintain an account with Firstrade.

If the Customer is a corporation, partnership, trust or other entity, the Customer represents that its governing instruments permit this Agreement, that this Agreement has been authorized by all applicable persons and that the signatory on the New Account Application is authorized to bind the Customer. The Customer represents that the Customer shall comply with all applicable laws, rules and regulations in connection with the Customer's account. The Customer further represents that no one except the Customer has an interest in the account or accounts of the Customer with you.

3. Agreement Subject to Approval

This agreement will be effective only upon our approval. We reserve the right to reject your application.

4. Termination

Firstrade reserves the right to terminate your account at any time and for any reason. Upon termination, you will remain liable for any debit balances or deficiencies in your account. You will reimburse Firstrade and/or Apex for the cost of collection of any debit balance or deficiency in connection with any of your accounts, including reasonable attorney's fees and court costs.

5. Account Protection

Firstrade Securities Inc. is a member of the Securities Investor Protection Corporation (SIPC), which protects brokerage account of each customer when a brokerage firm is closed due to bankruptcy or other financial difficulties and customer assets are missing from accounts. SIPC protects brokerage accounts of each customer up to \$500,000, of which \$250,000 may be in cash. Money market funds held in a brokerage account are considered securities. For more information on SIPC coverage, please visit www.sipc.org.

Our clearing firm, Apex Clearing Corporation, has purchased an additional insurance policy through a group of London Underwriters (with Lloyd's of London Syndicates as the Lead Underwriter) to supplement SIPC protection. This additional insurance policy becomes available to customers in the event that SIPC limits are exhausted and provides protection for securities and cash up to an aggregate of \$150 million. This is provided to pay amounts in addition to those returned in a SIPC liquidation. This additional insurance policy is limited to a combined return to any customer from a Trustee, SIPC and London Underwriters of \$37.5 million, including cash of up to \$900,000. This coverage does not protect against loss of the market value of securities.

6. Sweep Program

If you elect to participate in the FDIC sweep program, you acknowledge and agree that: (a) you have read and understand the sweep program terms and conditions available at www.firstrade.com/fdicterms and is aware of the products available in such sweep programs; (b) Firstrade may make changes to the FDIC sweep programs and products at any time, with our sole discretion and with or without notice to Customer; (c) the free credit balance in your Account may be included in the sweep program upon account opening; and (d) Firstrade has no obligation to monitor the applicable sweep program elected for the Customer's Account or to make recommendations about, or changes to, the sweep program that might be beneficial to the Customer.

7. Credit Verification

You authorize Apex or Firstrade to obtain a consumer report at the time of application to verify your creditworthiness and to obtain a consumer report from time to time for updates, renewals, extensions, and collection activity on any approved account. Upon your written request, Apex will disclose to you whether it obtained a report, and if so, the name and address of the consumer-reporting agency that provided it. In the event that your account is denied, as a result of the consumer report verification, you authorize Apex to provide to Firstrade the reason(s) for such denial.

Apex or Firstrade is authorized, in its discretion, should Apex or Firstrade for any reason deem it necessary for its protection, to request and obtain a consumer credit report for Customer.

8. Accuracy of Account Information

You represent and warrant that you have supplied us with accurate information in your new account application and no one except the account holders listed has an interest in the account. You agree to notify Firstrade in writing if there is a change in the facts set forth in the account information of your new account application, including your name, address and telephone number. In addition, you agree to notify Firstrade if any of the account holders become employed by a securities firm, securities exchange or an entity controlled by a securities exchange. You also agree to notify us if any of the account holders become a director, officer, 10% shareholder or an "affiliate" as defined by Rule 144 under the Securities Act of 1933.

9. Liens and Liquidations

All securities and other property held in any of your Firstrade accounts (which are carried by Apex), including accounts in which you have an interest, shall be subject to a general lien for discharge of all your indebtedness and other obligations to us. Such securities and other property shall be held by us as security for payment of any liability or indebtedness you may incur in any account with us. We reserve the right to transfer securities and other properties from any of your other accounts with us, whenever we determine such a transfer is appropriate for our protection and we reserve the right to determine at our discretion which securities and other property are to be sold and/or purchased in enforcement of our lien. Circumstances that may require the liquidation of an account include, but are not limited to: the failure of a customer to pay for securities purchased or the failure to deliver securities in good form; the filing of a petition of bankruptcy by or against a customer; the appointment of a receiver by or against a customer; an attachment levied against any account of the customer or any account in which the customer has an interest; or the customer's death. You are responsible for costs, commissions and losses arising from any actions we take to liquidate or close transactions in your account due to your failure to pay for transactions and/or to deliver securities in good form.

10. Losses Due to Extraordinary Events

Firstrade and Apex will not be liable for losses caused directly or indirectly by government restriction, exchange or market rulings, wars, strikes or any other conditions beyond their control.

11. Governing Laws

This agreement will be governed by the laws of the State of New York.

12. Entire Agreement and Severability

This agreement contains the entire understanding between us concerning the subject matter of this agreement. If any provision of this agreement is held to be invalid, void or unenforceable by reason of any law, rule, administrative order or judicial decision, that determination shall not affect the validity of the remaining provisions of this agreement.

13. Deposit of Equity

We may require full payment or an acceptable deposit prior to the acceptance of any order. In the case of all securities, we require payment in advance for purchases and securities in advance of sales. In the case of options, we require cleared funds in the account prior to the acceptance of any purchases or the delivery of stock certificates in good deliverable form prior to writing covered calls. For our protection, we may restrict your ability to withdraw funds represented by a check or other instrument or to apply such funds in settlement of a transaction.

14. Settlement of Transactions

The purchase and sale of securities are settled on "settlement date." Stock transactions are settled on the second business day after the transaction. Option transactions are settled on the business day after the transaction. You therefore agree to pay us for all securities purchased by settlement date and to deliver securities sold in good deliverable form by settlement date. Unless you make other arrangements with us, we may use available funds and securities in your brokerage account to settle a transaction. Exchange and federal securities regulations require us to liquidate a transaction or an account in the event of a failure to pay for a transaction or a failure to deliver securities in good deliverable form. You agree to be fully liable for any and all brokerage commissions, fees, margin interest charges and applicable taxes due to Firstrade and/or Apex in connection with transactions effected by you in your Firstrade brokerage account. All checks must be made payable to Firstrade Securities Inc. All securities must be endorsed to Apex Clearing Corporation upon delivery.

All checks must be made payable to Firstrade Securities Inc. All securities must be endorsed to Apex Clearing Corporation upon delivery.

15. Control or Restricted Securities

Prior to placing an order in connection with any securities subject to Rule 144 or 145(d) under the Securities Act of 1933, you must advise your broker of the status of the securities and you must furnish us with the necessary documents (including legal opinions) to clear legal transfer. You acknowledge that there may be delays involved with the processing of control or restricted securities and that you will not hold Firstrade or Apex liable for any losses caused directly or indirectly by such delays. Firstrade and/or Apex may require, in our discretion, that control or restricted securities not be sold or transferred until such securities clear legal transfer. Firstrade and/or Apex reserve the right in their sole discretion to refuse to process the legal transfer of any control or restricted securities or any security which bears a restrictive legend.

16. Customer's Responsibility Regarding Certain Securities

Certain securities may grant the securities holder valuable rights that may expire unless the holder takes action. These securities include (but are not limited to) warrants, stock rights, convertible securities, bonds, and securities subject to a tender or exchange offer. You acknowledge that you are responsible for knowing the rights and terms of all securities traded in your account and securities long in your account. We are not obligated to notify you of any upcoming expiration or redemption dates or to take any action on your behalf without specific instructions from you, except as required by law and the rules of regulatory authorities. If we hold securities in your account that are callable in part, you agree to participate in an impartial lottery allocation of the called securities, according to the rules of the New York Stock Exchange.

17. Joint Account Holders

If there is more than one account holder, each account holder is jointly and severally liable for obligations arising under this agreement. Each joint account holder, acting alone and without notice to any other account holder, has the authority to deal with us fully and completely. We will follow the instructions of any joint account holder and we will not be responsible for determining the purpose or propriety of any instruction received from any joint account holder. We reserve the right to require written instructions from all account holders, at our discretion. Any notice sent to one account holder will be deemed to be notice to all account holders.

18. Margin Accounts

SERVICES PROVIDED: We agree to act as your broker to purchase or sell securities, on margin as directed by you. In addition, Apex agrees to extend credit to you in accordance with their margin account rules. You will, at all times, be liable for the payment, upon demand, of any debit balance or other charges.

MAINTENANCE OF MARGIN: You will, at all times, maintain such securities and other property in your account as margin collateral as required by Firstrade Securities Inc., Apex and/or applicable exchange and federal regulations. A margin call may be issued if your account equity falls below such requirements. Firstrade and/or Apex retain sole discretion to determine whether additional collateral will be required.

You acknowledge that Firstrade and/or Apex are not obligated to request additional margin in the event your account falls below minimum margin requirements. Market conditions or other circumstances may not allow Firstrade and/or Apex to give you notice when your account equity becomes deficient or to allow you time in which to deposit additional equity. Firstrade and/or Apex, therefore, reserves the right in their sole discretion to sell securities and other property held in your account(s) as collateral, to cancel open orders, to buy securities and other property which may be short in your account, to close open option positions and to take any other action Firstrade and/or Apex deem necessary for their protection, all without prior notice, advertisement or demand to.

PLEDGE OF SECURITIES AND OTHER PROPERTY. All securities and other property now or hereafter held, carried or maintained by Apex in or for any account in which you have an interest may be pledged, re-pledged, hypothecated or hypothecated by Apex from time to time without notice, either separately or in common with other securities and property for any amount due in your accounts or for any greater amount and Apex may do so without retaining in their possession or under their control for delivery a like amount of similar securities or other property. You also authorize Apex to lend to themselves or others any securities or other property held by Apex on margin from your account or any accounts under your control.

INTEREST CHARGES ON DEBIT BALANCES: Your account will be charged interest monthly on the average daily net debit balance in all of your accounts, in accordance with Apex's margin rules, at the prevailing rate as determined by Apex. The interest charged will appear on your monthly statement and will indicate the rate and the period covered. The rate may change from time to time without prior notice, due to fluctuations in interest rates or other causes. Interest charges are based on a 360-day interest year. Interest is computed from the 16th day of the preceding month to the 15th day of the current month, except in January and December. In January, interest is computed from the 1st day of the month to the 15th. In December, interest is computed from the 16th day of the month to the 31st. In calculating margin interest, free credit balances in all accounts will be offset against any debit in the margin account and interest will be charged on the net debit balance, if any. The rate of interest charged can be found at <https://www.firstrade.com/content/en-us/pricing/marginrate>.

SHORT SALES: You agree that any "short" sale shall be designated as such to us at the time you place such an order and you hereby authorize us to mark such order "short." You acknowledge that a short sale is the sale of a security you do not own and that to facilitate a short sale Apex must borrow stock to cover the delivery to the purchaser(s). If the stock is recalled by the lender(s) of the securities, Apex will attempt to re-borrow the securities, but Apex may be forced to cover your short position on the open market at the then current market price. You will be liable for any debit balance remaining after a short position has been closed out. If any securities that you borrow are deemed as "hard to borrow", additional fee will be charged.

You agree to meet the appropriate margin requirements for your short account as required by Apex and/or applicable exchange or federal regulations. The credit balance generated by short sales in your account is not a free credit balance. If the market value of your short account is greater than the short account credit balance, interest will be charged on the appreciation in value of the short positions. If the market value of your short account is less than the short account credit balance, interest on any debit in the account will be reduced in relation to the decline in value. Each Friday's closing price is used to determine the increase or decrease in the short account and your account is thus marked to the market daily. **AGREEMENT SUBJECT TO APPROVAL:** This account and/or margin agreement will be effective only upon Firstrade and/or Apex approval. Firstrade and/or Apex reserve the right to reject your account and/or margin agreement.

AGREEMENT SUBJECT TO APPROVAL: This account and/or margin agreement will be effective only upon Firstrade and/or Apex approval. Firstrade and/or Apex reserve the right to reject your account and/or margin agreement.

19. Other Agreements

If the Customer trades any options, the Customer agrees to be bound by the terms of the Customer Option Agreement. The Customer understands that copies of these agreements are available at the disclosure section at <https://www.firstrade.com/content/en-us/customerservice/formcenter> 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 Firstrade and the Customer.

20. Customer's Estate

You agree that this agreement and all the terms and conditions contained within will be binding upon your heirs, executors, administrators and/or personal representatives.

21. Assignments

You acknowledge that this agreement shall inure to the benefit of Firstrade and/or Apex and their successors and assigns. Firstrade and/or Apex may assign their rights and duties under this agreement to any of their subsidiaries or affiliates without notice to you or to any other entity upon prior written notice to you.

22. Receipt of Communications

Communications will be sent to you at the mailing address specified in the new account application or your updated account information in your account profile page (or at such other address as you may specify in writing). All communications so sent, whether by mail, mailgram, email, messenger, electronic data communications, fax or otherwise, shall be considered delivered to you personally, whether actually received or not. You must inform us within a reasonable amount of time of any change in your name and/or address.

23. ARBITRATION

YOU ACKNOWLEDGE THAT YOU HAVE READ AND UNDERSTOOD THE FOLLOWING FACTS ABOUT ARBITRATION PROCEDURES:

- ARBITRATION IS FINAL AND BINDING ON THE PARTIES.
- THE PARTIES ARE WAIVING THEIR RIGHT TO SEEK REMEDIES IN COURT, INCLUDING THE RIGHT TO A JURY TRIAL.
- PRE-ARBITRATION DISCOVERY IS GENERALLY MORE LIMITED THAN AND DIFFERENT FROM COURT PROCEEDINGS.
- THE ARBITRATOR'S AWARD IS NOT REQUIRED TO INCLUDE FACTUAL FINDINGS OR LEGAL REASONING AND ANY PARTY'S RIGHT TO APPEAL OR TO SEEK MODIFICATION OF RULINGS BY THE ARBITRATORS IS STRICTLY LIMITED.
- THE PANEL OF ARBITRATORS WILL TYPICALLY INCLUDE A MINORITY OF ARBITRATORS WHO WERE OR ARE AFFILIATED WITH THE SECURITIES INDUSTRY. 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 AND WHO IS A MEMBER OF A PUTATIVE CLASS WHO HAS NOT OPTED ON (OF THE CLASS WITH RESPECT TO ANY CLAIMS ENCOMPASSED BY THE PUTATIVE CLASS ACTION UNTIL:
 - (I) THE CLASS ACTION 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.

YOU AGREE THAT ANY CONTROVERSY BETWEEN YOU AND FIRSTRAD SECURITIES INC., APEX CLEARING AND/OR ANY OF THEIR OFFICERS, DIRECTORS, EMPLOYEES, AGENTS OR AFFILIATES RELATING TO THE ACCOUNT AGREEMENT, YOUR ACCOUNT AND THE TRANSACTIONS THEREIN OR IN ANY WAY ARISING OUT OF YOUR RELATIONSHIP WITH FIRSTRAD SECURITIES INC. AND/OR APEX, WILL BE SETTLED BY ARBITRATION IN ACCORDANCE WITH THE RULES THEN IN EFFECT OF THE FINANCIAL INDUSTRY REGULATORY AUTHORITY (FINRA), AS GOVERNED BY THE LAWS OF THE STATE OF NEW YORK, WHICH MUST BE COMMENCED BY A WRITTEN NOTICE OF INTENTION TO ARBITRATE. JUDGMENT UPON ARBITRATION AWARD MAY BE RENDERED IN ANY COURT OF COMPETENT JURISDICTION.

24. Statements and Confirmations

STATEMENTS: All transactions, including the purchase and sale of securities, dividends, interest payments and redemptions for securities held in your account, will appear on your monthly account statement. Purchase and sale transactions will be posted on your statement as of the transaction settlement date. Securities held in your account will be listed on your statement. You are responsible for changing or canceling any open orders in your account.

CONFIRMATIONS: Confirmations will be sent out for all purchase and sale transactions on the next business day following the trade.

25. Electronic Document Delivery

Firstrade is required to send you trade confirmations, monthly account statements, tax documents, and proxies/prospectuses, and other account documents in writing. However, Firstrade, through Apex, shall

send notification regarding these documents to your e-mail address as it appears on the account. By sending this notification by e-mail, Apex will fulfill its regulatory obligation to provide written notification of these documents.

You accept the paper trade confirmations, monthly statements, tax documents, or proxies/prospectuses, or other account documents to be delivered electronically. You attest the e-mail address provided is true and correct, accept the document notifications by e-mail, view and access these documents online in Firstrade Securities Inc. E-Doc account. You understand that all documents will only be transmitted online unless you deliver written revocation of this agreement to service@firstrade.com. Upon receipt, Firstrade will forward paper copies of the documents by regular mail to your address of record with a mailing fee charged directly towards your account.

26. Market Data

Stock price quotations and other market data we may provide you with are obtained from independent pricing services we believe are reliable. However, we cannot guarantee the accuracy of such data and we will not be held liable for any losses incurred by your use of it.

27. Order Flow Payment and Order Execution Routing Disclosure Statement

Depending on the security traded and absent specific direction from the Customer, equity and option orders are routed to market centers (i.e., broker-dealers, primary exchanges or electronic communication networks) for execution. Routing decisions are based on a number of factors including the size of the order, the opportunity for price improvement and the quality of order executions, and decisions are regularly reviewed to ensure the duty of best execution is met. The Introducing Broker may receive compensation or other consideration for the placing of orders with market centers for execution. The amount of the compensation depends on the agreement reached with each venue. The source and nature of compensation relating to the Customer's transactions will be furnished upon written request.

Pursuant to a U.S. SEC Rule 606(a) requires all brokerage firms to make publicly available quarterly reports, broken down by calendar month, containing certain required statistical information regarding the routing of held, non-directed customer orders in Regulation NMS stocks, as well as both held and not held, non-directed customer orders in listed options with a market value of less than \$50,000. Firstrade is publishing such quarterly report in accordance with Rule 606(a) on Firstrade website and will keep the report publicly available for a period of three (3) years. <https://www.firstrade.com/legal/order-routing>.

Pursuant to a U.S. SEC Rule 607, Firstrade is required to disclose its payment for order flow practices, upon opening a new customer account and on an annual basis thereafter. Firstrade sends certain equity orders to exchanges, electronic communication networks, or broker-dealers during normal business hours and during extended trading sessions. Some of those market venues may provide payments or charge access fees to Firstrade depending upon the characteristics of the order and any subsequent executions. Information on these payments can be found by viewing Firstrade's SEC Rule 606(a) Quarterly reports. <https://www.firstrade.com/legal/order-routing>. In addition, a paper copy may also be provided on request, along with any other details of these payments and fees. Firstrade may receive compensation from routing exchange-listed options to market venues to achieve the best execution available under the particular circumstances of the specific transaction requested.

28. Miscellaneous Fees

Your account may be charged certain fees related to the type of activity in the account. Examples of activities which generate fees include, but are not limited to; Mailgram Notices (margin call, sell-out &

buy-in), Bounced Checks, Wiring of Funds, Outgoing Account Transfers, Issuance of Stock Certificates, Legal Transfers, Option Assignment, Paper Account Statements and Confirmations, Duplicate Copies of Account Statements, Confirmations and Checks.

Visit our website at www.firsttrade.com for more information related to fees. Fees are subject to change without notice.

29. Tax Treaty Eligibility

This agreement shall serve as the Customer's certification that you are eligible to receive tax treaty benefits between the country or (of) residence indicated on the new account form and the country (ies) of origin holding jurisdiction over the instruments held within the customer's account. The Customer should fill out a W-8BEN form and provide the FTIN (taxpayer identification number issued by the residence country).

30. Trusted Contact

Under FINRA Rule 4512, Firsttrade Securities Inc. is required to disclose to you (the customer) that our clearing firm, Apex Clearing Corporation or an associated person of Firsttrade and Apex is authorized to contact the trusted contact person and disclose information about the customer's account to address possible financial exploitation, to confirm the specifics of the customer's current contact information, health status, or the identity of any legal guardian, executor, trustee or holder of a power of attorney, or as otherwise permitted by FINRA Rule 2165.

31. ACH Agreement

If I request Automated Clearinghouse ("ACH") transactions from my Firsttrade Account at Apex Clearing Corporation, I authorize Apex to originate or facilitate transfer credits/debits to/from my eligible bank account. Transactions sent through the NACHA network will be subject to all applicable rules of NACHA and all rules set forth in Federal Reserve Operating circulars or other applicable laws and regulations. ACH deposits to my Firsttrade account are provisional. If the beneficiary bank does not receive final and complete payment for a payment order transferred through ACH, the beneficiary bank is entitled to recover from the beneficiary any provisional credit and Apex or Firsttrade may charge my account for the transaction amount. I understand Apex or Firsttrade may not notify me of any returned or rejected ACH transfers. I agree to hold Firsttrade, Apex and Apex's agents free of liability for compliance with these instructions. I hereby agree to hold harmless Firsttrade, Apex and each of its affiliates, offices, directors, employees, and agents against, any claims, judgments, expenses, liabilities or costs of defense or settlement relating to: (a) any refusal or failure to initiate or honor any credit or debit request, by Apex or Firsttrade, whether (i) due to a lack of funds necessary to credit my account; (ii) due to inadvertence, error caused by similarity of account holder names or (iii) otherwise provided Apex or Firsttrade has not acted in bad faith; (b) if the routing number is incorrect or the routing number or other information changes at another U.S. financial institution or (c) any loss, damage, liability or claim arising, directly or indirectly, from any error, delay or failure which is caused by circumstances beyond Apex or Firsttrade's direct control. To the extent permitted by applicable law or regulation, Apex and Firsttrade hereby disclaims all warranties, express or implied, and in no event shall Apex or Firsttrade be liable for any special indirect, incidental, or consequential damages whatsoever resulting from the ACH electronic service or any ACH transactions. Nothing in this herein shall constitute a commitment or undertaking by Apex or Firsttrade to effect any ACH transaction or otherwise act upon my instructions or those of Firsttrade with respect to any account at Apex. This authorization shall remain in full force and effect

until I revoke authorization by written notification to Firsttrade that is forwarded to Apex. I understand that Apex and Firsttrade has the right to terminate or suspend the ACH agreement at any time and without notice.



Self-directed Trading Account Risk Disclosure

All Firsttrade Accounts are self-directed. Customers are solely responsible for any and all orders placed in their Accounts and understand that all orders entered by them are unsolicited and based on their own investment decisions or the investment decisions of their duly authorized representative or agent. Consequently, any customer of Firsttrade agrees that neither Firsttrade nor any of its employees, agents, principals or representatives:

- solicit orders;
- recommend any security, transaction orders;
- provide investment advice in relation with Firstrade account;
- make discretionary trades;
- produce or provide research;
- act as a market maker in any security;

The research materials that are available through www.firstrade.com are intended for informational and educational purposes only. They do not constitute a recommendation to place an order or engage in any investment strategies.

All securities trading is speculative in nature and involves substantial risk of loss. It is very important that Customers understand all the risk of any form of trading. The U.S. Securities and Exchange Commission websites - <https://www.sec.gov> , <https://www.investor.gov> , and FINRA - <http://www.finra.org> , provide useful information for investors.



Privacy and Security Policy

FIRSTRADE is committed to protecting our clients' personal and financial information. In the course of providing you with FIRSTRADE's brokerage services, we need to collect and maintain certain nonpublic Personal Identifiable Information about you. Firstrade respects our clients' privacy concern and adhere to a strict confidentiality policy to protect your information. This Privacy and Security Policy describes what nonpublic Personal Identifiable Information we collect, what we do with it, and how we protect it.

What types of nonpublic Personal Identifiable Information about me does FIRSTRADE collect?

When you apply for or maintain an account with FIRSTRADE, we collect Personal Identifiable Information including the following types of information:

- Information provided by you, such as your name, address, telephone numbers, Social Security number/Tax Identification number, date of birth, employment information, financial data, and any other personal information connected to identifying you.
- Transaction history with us such as account balance and trading activity will be reviewed periodically.
- In some cases, we may collect information from consumer-reporting agencies.

What types of nonpublic Personal Identifiable Information about me does FIRSTRADE disclose?

FIRSTRADE discloses nonpublic Personal Identifiable Information about you described above, primarily to provide you with the financial services you seek from us. We do not sell your personal information. We do not disclose nonpublic personal information about present or former clients, except as required or permitted by law.

What are my rights to opt-out of disclosure and how can I exercise them?

If you prefer that we do not disclose nonpublic personal information about you to the non-financial services companies described in the paragraph above, you may opt-out of those disclosures, that is, you may direct us not to make those disclosures (other than those disclosures required by law).

You may provide your name, address, email address, daytime phone, your account number and opt-out request to us by email at service@firstrade.com or by calling 1-800-869-8800.

To what other types of entities might FIRSTRADE disclose my nonpublic personal information?

FIRSTRADE may disclose information we collect from you, such as your contact information, to service providers who perform marketing functions on our behalf. Specifically, your name, address and/or email address are sometimes provided to vendors who send email or regular mail on FIRSTRADE's behalf.

We disclose information to nonaffiliated companies that work for us in providing financial services to you. For example, we provide information to nonaffiliated companies that prepare and mail statements and transaction confirmations. These companies acting on our behalf are required to keep your personal information confidential.

Finally, FIRSTRADE discloses nonpublic personal information to nonaffiliated third parties as permitted or required by law. These parties include government/regulatory organizations such as the Internal Revenue Service (IRS) and the Securities and Exchange Commission (SEC). Disclosures for which you have provided your consent are also permitted.

How does FIRSTRADE use your Personal Identifiable Information?

We use your information to fulfill your requests for specific products and services like opening a brokerage account with us. We use your information to contact you regarding special offers, products and services that may be of your interest and also provide you with the best customer service experience at Firstrade.

Firstrade Securities, Inc. uses third parties to gather End User's data from financial institutions. By using our service, you grant our third-party provider the right, power and authority to act on your behalf to access and transmit your personal and financial information from the relevant financial institution according to terms of our third-party provider's privacy policy.

How does FIRSTRADE protect the confidentiality and security of my nonpublic Personal Identifiable Information?

We maintain physical, electronic, and procedural safeguards that comply with federal standards to guard your nonpublic personal information. We protect your account information by placing it on the secure portion of our website. Our servers have been enabled with Secure Sockets Layer (SSL) technology to prevent unauthorized parties from viewing your nonpublic personal information that you provide or access during a secure session. In addition, we employ Entrust's digital certificate services to encrypt the information exchanged between you and Firstrade web servers.

Access to your nonpublic personal information is limited to those employees who have valid business reason to access your information. These employees such as customer service personnel access as needed to provide you with the best customer service experience. All Firstrade employees are trained on the importance of protecting our client's information and maintaining the confidentiality and security of your Personal Identifiable Information.

You can take steps to maximize your security online and to protect your confidential information. NEVER share your Password with anyone, and change it periodically. You can change your Login Password at any time in the My Settings section under the My Account tab. When accessing the FIRSTRADE website, you should always exit by using the "Logout" button or close your browser completely.

What should I know about "cookies"?

"Cookies" are elements of data that a website can send to your browser and store on your computer. Cookies can note that your browser was used to visit certain sites, pages, or advertisements on a certain date. Cookies cannot be used to obtain data from your hard drive, get your e-mail address or steal sensitive or personal information about you. FIRSTRADE uses cookies to enhance navigation and functionality of our website, to securely verify your identity, and to personalize aspects of your experience on our website. We also use cookies to let us know how visitors are using our website, so that we can improve our website and your experience on it. You do have control over cookies. Most browsers can be set to notify you when a cookie is being placed on your computer. You can also set most browsers to refuse to accept cookies, although this may affect your Internet experience. You can also erase cookies that are already on your computer. For more information on working with cookies,

you should consult the User Manual, FAQ, or Help function of your specific browser and operating system software.

For answers to other questions regarding FIRSTRADE's Privacy Policy, please email service@firstrade.com or call 1-800-869-8800.



ELECTRONIC SERVICES AGREEMENT

Please read this Electronic Services Agreement before using any of the electronic services made available by Firsttrade Securities Inc. In order to use these services, you must agree to be bound by the following terms and conditions.

- 1. INTRODUCTION:** You acknowledge that this agreement between you and Firsttrade Securities Inc. states the terms and conditions regarding your use of any Electronic Service offered by Firsttrade Securities Inc. and other authorized third party service providers, including the use of such services to enter transactions in your Firsttrade Securities Inc. brokerage account. Your use of Firsttrade Securities Inc.'s Electronic Services will indicate your acceptance of the following terms and conditions. The terms and conditions set forth herein supplement the terms and conditions contained in the Firsttrade Securities Inc. Account Agreement and Information Guide furnished to you and by using Firsttrade Securities Inc.'s Electronic Services you confirm your agreement to comply with the terms and conditions set forth therein.
- 2. PROVISION OF SERVICES:** You acknowledge that for the purpose of this agreement Firsttrade Securities Inc.'s Electronic Services will be defined as any electronic or interactive product or service offered by Firsttrade Securities Inc. which allows Firsttrade Securities Inc. clients to: communicate with Firsttrade Securities Inc. or an authorized third-party service provider; to obtain information or quotations from Firsttrade Securities Inc. or an authorized third-party service provider; or enter into brokerage transactions with Firsttrade Securities Inc. includes electronic data communications transmitted by you to Firsttrade Securities Inc. through the use of personal, home or business computers connected by a modem or other device to an authorized telecommunications network designated by Firsttrade Securities Inc. You acknowledge that this agreement also governs your use of automated touch-tone telephone services through which you can obtain account information and quotations and to enter brokerage transactions. Firsttrade Securities Inc.'s Electronic Services include, but are not limited to, "Market Touch" and the services of any third-party information providers offered in conjunction with Firsttrade Securities Inc.'s electronic brokerage services. You acknowledge that Firsttrade Securities Inc. may modify or discontinue the Electronic Services offered pursuant to this agreement without prior notice to you.
- 3. COMMISSIONS, FEES AND CHARGES:** You agree to be fully liable for any and all brokerage commissions, fees, margin interest charges and payments due to Firsttrade Securities Inc. and/or Apex Clearing in connection with trades effected by you in your Firsttrade Securities Inc. brokerage account(s) through Firsttrade Securities Inc.'s Electronic Services. Such brokerage commissions, fees, margin interest charges and payments will be paid directly to Firsttrade Securities Inc. in accordance with the terms and conditions specified in the Firsttrade Securities Inc. Account Agreement and Information Guide. You agree that Firsttrade Securities Inc. may require a deposit before you can begin trading using Firsttrade Securities Inc.'s Electronic Services (deposited funds can be used toward payment of your first transaction). You agree to pay all fees and charges associated with your use of any of Firsttrade Securities Inc.'s Electronic Services, including, without limitation those of any third-party information providers offered through Firsttrade Securities Inc.

4. **PASSWORDS AND SECURITY:** You acknowledge that you will be the only authorized user of Firstrade Securities Inc.'s Electronic Services for your account(s). You will be fully responsible for the confidentiality and use of your user name(s) and password (s) and you agree that you will be fully and solely responsible for all activities, including brokerage transactions, which arise from the use of your user name (s) or password(s) (except as provided for in paragraph 5 below). You also agree that you will be fully and solely responsible for all activities, including brokerage transactions, which arise from your authorization to link your brokerage account(s) to any other Firstrade Securities Inc. account(s). You acknowledge that we may tape record conversations with you, whether in person or by telephone, for purposes of verification and you consent to such recording.

5. **NOTIFICATION OF UNAUTHORIZED USE:** You agree that as a condition of being approved to use Firstrade Securities Inc.'s Electronic Services you will immediately notify Firstrade Securities Inc. if:
 - a. You have placed an order using Firstrade Securities Inc.'s Electronic Services and you do not receive an order number;
 - b. You have placed an order using Firstrade Securities Inc.'s Electronic Services and you do not receive an accurate written or electronic confirmation of the order, its execution or cancellation with- in five business days;
 - c. You have received confirmation of an order or orders which you did not place or any similar conflicting report; or
 - d. You become aware of any unauthorized use of your user name(s), password(s), or any product or service related to your brokerage account(s).

If you fail to notify Firstrade Securities Inc. immediately upon the occurrence of any of the above events, you agree that Firstrade Securities Inc. will not have any responsibility or liability to you or any other person whose claim may arise through you for any claims with the handling, mishandling or loss of any order. Any liability of Firstrade Securities Inc. arising out of any action or omission by Firstrade Securities Inc. with respect to the handling, mishandling or loss of any order shall be limited to an amount equal to the loss incurred due to the action or omission during the five business days after the date on which you first became obligated to give Firstrade Securities Inc. notice with respect to such transaction (s) pursuant to this Section. You agree that Firstrade Securities Inc. and/or any of its officers, directors, employees, agents or affiliates will not have any other liability to you or any other person whose claims may arise through you for any consequential, incidental, special or indirect damages, even if Firstrade Securities Inc. has been advised of the possibility of such damages. Firstrade Securities Inc. shall not be responsible for or deemed to be in default under this agreement due to any delay or failure in performance resulting directly or indirectly from any cause beyond Firstrade Securities Inc.'s reasonable control.

6. **WAIVER; LIMITATION OF LIABILITY; INDEMNIFICATION:** Online trading has inherent risk due to system response and access times that may vary due to market conditions, system performance, and other factors. You agree that your use of Firstrade Securities Inc.'s Electronic Services (website or mobile app or any other services) at your sole risk.

The services are provided "as is" and "as available". Neither Firstrade, employee nor any third party providers make any representations nor warranties express or implied, including, without limitation, any implied warranties of merchantability or fitness for a particular purpose in respect of any services provided in connection with this account, or any information programs or products obtained from,

though, or in connection with these services. In no event will Firstrade or any third party be liable for direct, indirect, incidental, or consequential damages resulting from any defect in or use of these services. You understand that to effect securities transactions will be limited in all respects to the terms and conditions of this agreement and any other agreement between you and Firstrade Securities Inc.

Firstrade Securities Inc. will have no liability to you with respect to any transaction or attempted transaction by you which is not in accordance with the terms and conditions specified herein or in such other agreement and you will indemnify Firstrade Securities Inc. from any claim of a third party related to any such transaction or related transaction.

YOU UNDERSTAND AND AGREE THAT FIRSTRADE, ITS RESPECTIVE OFFICERS, DIRECTORS, AND EMPLOYEES, AND PROVIDERS WILL NOT BE LIABLE TO YOU OR TO THIRD PARTIES UNDER ANY CIRCUMSTANCES, OR HAVE ANY RESPONSIBILITY WHATSOEVER, FOR ANY SPECIAL, INDIRECT, INCIDENTAL, PUNITIVE OR CONSEQUENTIAL DAMAGES (INCLUDING LOST PROFITS, TRADING LOSSES, AND DAMAGES) THAT YOU MAY INCUR IN CONNECTION WITH YOUR USE OF THE SERVICE PROVIDED BY FIRSTRADE UNDER THIS AGREEMENT, INCLUDING YOUR USE OF THE APP, THE WEBSITE, THE MARKET DATA, THE INFORMATION, OR THE CONTENT. FIRSTRADE, AND ITS RESPECTIVE OFFICERS, DIRECTORS, AND EMPLOYEES SHALL NOT BE LIABLE BY REASON OF DELAYS OR INTERRUPTIONS OF THE SERVICE OR TRANSMISSIONS, OR FAILURES OF PERFORMANCE OF OUR SYSTEM, REGARDLESS OF CAUSE, INCLUDING THOSE CAUSED BY GOVERNMENTAL OR REGULATORY ACTION, THE ACTION OF ANY EXCHANGE OR OTHER SELF REGULATORY ORGANIZATION, OR THOSE CAUSED BY SOFTWARE OR HARDWARE MALFUNCTIONS.

You also agree that Firstrade, its respective officers, directors and employees (collectively, "Indemnified Parties") will have no responsibility or liability to you in connection with the performance or non-performance by any exchange, clearing organization, market data provider, or other third party (including other broker-dealers and clearing firms, and banks) or any of their respective agents or affiliates, of its or their obligations relative to any securities. You agree that Indemnified Parties will have no liability, to you or to third parties, or responsibility whatsoever for: (i) any Losses resulting from a cause over which Indemnified Parties do not have direct control, including the failure of mechanical equipment, unauthorized access, theft, operator errors, government restrictions, force majeure, market data availability or quality, exchange rulings or suspension of trading; and (ii) any special, indirect, incidental, consequential, punitive or exemplary damages (including lost profits, trading losses and damages) that you may incur in connection with your use of the App, the Website, and other services provided by Indemnified Parties under this Agreement. Further, if you authorize or allow third parties to gain access to Firstrade's services, including your Accounts, you will indemnify, defend and hold harmless Firstrade, and Firstrade and its respective officers and employees against any Losses arising out of claims or suits by such third parties based upon or relating to such access and use.

- 7. ACCOUNT RESTRICTIONS:** You agree that Firstrade Securities Inc. reserves the right in its sole discretion to reject, cancel or modify any order which you have placed through Firstrade Securities Inc.'s Electronic Services for any reason and without prior notice to you, including orders for which you have received an order number. You acknowledge that any order you place which Firstrade Securities Inc., in its sole discretion, deems to be disruptive to the securities markets, unusual in size, ripe or credit risk or which exceeds Firstrade Securities Inc.'s usual authorized limits may be subject to rejection, cancellation or modification. You acknowledge that market orders cannot always be

canceled and the order may be executed before the request for cancellation is received by Firstrade Securities Inc. You acknowledge that your orders may not be reviewed for accurateness and/or suitability by Firstrade Securities Inc. prior to their submission to a market center and you agree that you are fully responsible for determining the suitability of your orders and your investment decisions. You acknowledge that Firstrade Securities Inc. may, in its sole discretion, place trading restrictions on your account(s).

8. **SUSPENSION OR TERMINATION OF SERVICES:** You agree that Firstrade Securities Inc. reserves the right in its sole discretion to suspend or terminate your access to any or all of Firstrade Securities Inc.'s Electronic Services for any reason and without prior notice to you. You agree not to hold Firstrade Securities Inc. responsible or liable for any disruptions in service due to: telephone network, computer network or other system problems beyond the control of Firstrade Securities Inc.: system maintenance or system upgrades; or any other event or circumstance beyond the control of Firstrade Securities Inc.
9. **PROVISION OF MARKET DATA AND THIRD-PARTY INFORMATION:** You agree that the market data, news and other information provided to you through Firstrade Securities Inc.'s Electronic Services (directly or indirectly through an authorized third- party information provider) are for your personal use only and that you will not retransmit or republish these data in any form. You acknowledge that the data provided to you are obtained from sources believed to be reliable, are provided solely on a best efforts basis for your convenience and that no guarantees are made by Firstrade Securities Inc. or any information provider as to their accuracy, completeness, timeliness or correct sequencing. You acknowledge that while access to investment recommendations, advice, opinions and judgments is available through Firstrade Securities Inc.'s Electronic Services, none are developed or endorsed by Firstrade Securities Inc. You agree not to hold Firstrade Securities Inc. for its information or its information providers liable for any investment decision you may make based on your reliance on or use of such data or any liability which may arise due to delays or interruptions in the delivery of such data for any reason.
10. **AMENDMENTS:** You agree that Firstrade Securities Inc. may change the terms and conditions of this agreement, in whole or in part, upon notice to you; no provision of this agreement may be amended in any other manner. You agree to use Firstrade Securities Inc.'s Electronic Services and any additional services offered through Firstrade Securities Inc. in the future only in accordance with the terms and conditions specified in this agreement as amended from time to time by Firstrade Securities Inc. and that any amendments to the terms and conditions will be deemed effective upon dissemination by Firstrade Securities Inc. Use of Firstrade Securities Inc.'s Electronic Services after receipt of such amendments will be deemed to be acceptance of such amendments.
11. **ENTIRE AGREEMENT:** This agreement, together with your account agreement(s) and any user license agreement(s) to which you may be a party (including the Firstrade Securities Inc. Account Agreement and Information Guide), contains the entire agreement between you and Firstrade Securities Inc. with respect to the subject matter contained in this agreement and supersedes all prior communications, whether oral, written or electronic. If any provision of this agreement is held to be invalid, void or unenforceable by reason of any law, rule, administrative order or judicial decision, that determination shall not affect the validity of the remaining provisions of this agreement. This agreement will be governed by the laws of the State of New York.



Margin Risk Disclosure Statement

We are furnishing this document to you to provide some basic facts about purchasing securities on margin, and to alert you to the risks involved with trading securities in a margin account. Before trading stocks in a margin account, you should carefully review the margin agreement provided by your broker. Consult us at service@firsttrade.com regarding any questions or concerns you may have with your margin accounts.

When you purchase securities, you may pay for the securities in full or you may borrow part of the purchase price from our clearing firm, Apex Clearing Corporation ("Apex"). If you choose to borrow funds from Apex, you will open a margin account. The securities purchased are the firm's collateral for the loan to you. If the securities in your account decline in value, so does the value of the collateral supporting your loan, and as a result, we or Apex can take action, such as issue a margin call and/or sell securities in your account, in order to maintain the required equity in the account.

It is important that you fully understand the risks involved in trading securities on margin. These risks include the following:

- **You can lose more funds than you deposit in the margin account.** A decline in the value of securities that are purchased on margin may require you to provide additional funds to the firm that has made the loan to avoid forced sale of those securities or other securities in your account.
- **The firm can force the sale of securities in your account.** If the equity in your account falls below the maintenance margin requirements under the law, or the firm's higher house requirements, the firm can sell the securities in your account to cover the margin deficiency. You also will be responsible for any shortfall in the account after such a sale.
- **The firm can sell your securities without contacting you.** Some investors mistakenly believe that a firm must contact them for a margin call to be valid, and that the firm cannot liquidate securities in their accounts to meet the call unless the firm has contacted them first. This is not the case. Most firms will attempt to notify their customers of margin calls, but they are not required to do so. However, even if a firm has contacted a customer and provided a specific date by which the customer can meet a margin call, the firm can still take necessary steps to protect its financial interest, including immediately selling the securities without notice to the customer.
- **You are not entitled to choose which security in your margin account is liquidated or sold to meet a margin call.** Because the securities are collateral for the margin loan, the firm has the right to decide which security to sell in order to protect its interests.
- **The firm can increase its house maintenance margin requirement at any time and is not required to provide you advance written notice.** These changes in firm policy often take effect immediately and may result in the issuance of a maintenance margin call. Your failure to satisfy the call may cause the member to liquidate or sell securities in your account.

- **You are not entitled to an extension of time on a margin call.** While an extension of time to meet margin requirements may be available to customers under certain conditions, a customer does not have a right to the extension.
- **The IRS requires Broker Dealers to treat dividend payments on loaned securities positions as a substitute payment in lieu of a dividend.** A substitute payment is not, a qualified dividend and is taxed as ordinary income.
- **Industry regulations may limit, in whole or in part, your ability to exercise voting rights of securities that have been lent or pledged to others.** You may receive proxy materials indicating voting rights for a fewer number of shares than are in your account, or you may not receive any proxy materials.

CREDIT TERMS & POLICIES

The following Disclosure of Credit Terms and Policies is required by the Securities and Exchange Commission and is part of your Customer Account Agreement. It describes the terms under which Apex Clearing Corporation extends credit and charges interest and how your obligations are secured by property in your Account.

Interest Charges. Apex will charge interest on a daily basis on the credit it extends to you. The rate of interest charged by Apex is set by us and can be found at <https://www.firsttrade.com/content/en-us/pricing/marginrate>. The daily interest charges are calculated by multiplying your "daily adjusted debit balance" by the "daily margin interest rate." Generally speaking, your daily adjusted debit balance is the actual settled debit balance in your Margin and Short Account, increased by the value of securities held short and reduced by the amount of any settled credit balance carried in your Cash Account.

Your daily-adjusted debit balance is calculated each day by adjusting your previous day's balance by any debits and credits to your account and by changes in the value of short positions. If your daily-adjusted debit balance is reduced because you deposit a check or other item that is later returned to us unpaid, your account may be adjusted to reflect interest charges you have incurred.

Apex reserves the right to charge interest on debit balances in the Cash Account. Periodically, we or Apex will send you a comprehensive statement showing the activity in your account, including applicable interest charges, interest rates and adjusted daily debit balances.

Please read clearing firm, **Apex Clearing Corporation's Margin Disclosure Statement** for additional margin information and credit terms & policies.



DISCLOSURE
MARGIN RISK DISCLOSURE STATEMENT

❖ FINRA Rule 2264

Apex is furnishing this document to provide you with basic facts about purchasing securities on margin, and to alert you to the risks involved with trading securities in a margin account. Before trading in a margin account, you should carefully review the margin agreement provided by your broker. Consult your broker regarding any questions or concerns you may have with your margin accounts. When you purchase securities, you may pay for the securities in full or you may borrow part of the purchase price from your brokerage firm. If you choose to borrow funds from your firm, you will open a margin account with the firm. The securities purchased are the firm's collateral for the loan to you. If the securities in your account decline in value, so does the value of the collateral supporting your loan, and as a result, the firm can take action, such as issue a margin call and/or sell securities in your account, in order to maintain the required equity in the account.

It is important that you fully understand the risks involved in trading securities on margin. These risks include the following:

- **You can lose more funds than you deposit in the margin account**
A decline in the value of securities that are purchased on margin may require you to provide additional funds to the firm that has made the loan to avoid the forced sale of those securities or other securities in your account.
- **The firm can force the sale of securities in your account**
If the equity in your account falls below the maintenance margin requirements under the law, or the firm's higher "house" requirements, the firm can sell the securities in your account to cover the margin deficiency. You also will be responsible for any shortfall in the account after such a sale.
- **The firm can sell your securities without contacting you**
Some investors mistakenly believe that a firm must contact them for a margin call to be valid, and that the firm cannot liquidate securities in their accounts to meet the call unless the firm has contacted them first. This is not the case. Most firms will attempt to notify their customers of margin calls, but they are not required to do so. However, even if a firm has contacted a customer and provided a specific date by which the customer can meet a margin call, the firm can still take necessary steps to protect its financial interest, including immediately selling the securities without notice to the customer.

- **You are not entitled to choose which security in your margin account is liquidated or sold to meet a margin call**
Because the securities are collateral for the margin loan, the firm has the right to decide which security to sell in order to protect its interests.
- **The firm can increase its “house” maintenance margin requirement at any time and is not required to provide you advance written notice**
These changes in firm policy often take effect immediately and may result in the issuance of a maintenance margin call. Your failure to satisfy the call may cause the member to liquidate or sell securities in your account.
- **You are not entitled to an extension of time on a margin call**
While an extension of time to meet margin requirements may be available to customers under certain conditions, a customer does not have a right to the extension.
- **The IRS requires Broker Dealers to treat dividend payments on loaned securities positions as a “substitute payment” in lieu of a dividend**
A substitute payment is not, a “qualified dividend” and is not taxed as ordinary income.
- **Industry regulations may limit, in whole or in part, your ability to exercise voting rights of securities that have been lent or pledged to others**
You may receive proxy materials indicating voting rights for a fewer number of shares than are in your account, or you may not receive any proxy materials.

APEX CREDIT TERMS AND POLICIES

The following Disclosure of Credit Terms and Policies is required by the Securities and Exchange Commission and is part of your Apex Account - Customer Account Agreement. It describes the terms under which Apex Clearing extends credit and charges interest and how your obligations are secured by property in your Account.

Interest Charges

Apex Clearing will charge interest on a daily basis on the credit extended to you. The daily interest charges are calculated by multiplying your "daily adjusted debit balance" by the "daily margin interest rate." Generally speaking, your daily adjusted debit balance is the actual settled debit balance in your Margin and Short Account, increased by the value of securities held short and reduced by the amount of any settled credit balance carried in your Cash Account.

Apex Clearing calculates your daily-adjusted debit balance each day by adjusting your previous day's balance by any debits and credits to your account and by changes in the value of short positions. If your daily-adjusted debit balance is reduced because you deposit a check or other item that is later returned to Apex Clearing unpaid, Apex Clearing may adjust your account to reflect interest charges you have incurred.

Apex Clearing reserves the right to charge interest on debit balances in the Cash Account. Periodically, Apex Clearing will send you a comprehensive statement showing the activity in your account, including applicable interest charges, interest rates and adjusted daily debit balances.

Daily Margin Interest Rate

The "daily margin interest rate" is based on a 360-day year. It is calculated for each day by dividing the applicable margin interest rate shown in the table below by 360. Note that the use of a 360-day year results in a higher effective rate of interest than if a year of 365 days were used.

Apex Clearing sets the Base Rate at its discretion with reference to commercially recognized interest rates, industry conditions relating to the extension of margin credit and general credit market conditions.

Your margin interest rate will be adjusted automatically and without notice to reflect any change in the Base Rate. If your interest rate increases for any reason other than a change in the Base Rate, Apex Clearing will give you written notice at least 30 days prior to that change.

Compounding Interest Charges

Apex Clearing compounds interest on a daily basis. Interest charges will accrue to your account each day. Apex Clearing will include the charges in the next day's opening debit balance and charge interest accordingly. The interest rates described above do not reflect compounding of unpaid interest charges; the effective interest rate, taking into effect such compounding, will be higher.

Initial Margin Requirements

The Federal Reserve Board and various stock exchanges determine margin loan rules and regulations.

When you purchase securities on margin, you agree to deposit the required initial equity by the settlement date and to maintain your equity at the required levels. The maximum amount Apex Clearing currently may loan for common stock (equity) securities is 50% of the value of marginable securities purchased in your Margin and Short Account; different requirements apply to nonequity securities, such as bonds or options. If the market value of stock held as collateral increases after you have met the initial margin requirements, your available credit may increase proportionately. Conversely, if the market value decreases, your available credit may proportionately decrease.

Initial margin requirements may change without prior notice. Apex Clearing may impose anytime and without prior notice more stringent requirements on positions that in our sole discretion involve higher levels of risk; for example, higher limits may apply for thinly traded, speculative or volatile securities, or concentrated positions of securities.

You may purchase only certain securities on margin or use them as collateral in your Margin and Short Account. Most stocks traded on national securities exchanges, and some over-the-counter (OTC) securities are marginable. At our discretion, Apex Clearing reserves the right not to extend credit on any security.

Equity securities with a market value of less than \$3 per share may not be purchased on margin or deposited as margin collateral. If the market value of a security drops below \$3.00 per share, the security will not be assigned any value as collateral to secure your margin obligations.

Margin Maintenance Requirements

You must maintain a minimum amount of equity in your account to collateralize your outstanding loans and other obligations. Margin maintenance requirements are set:

- By the rules and regulations of the New York Stock Exchange, the American Stock Exchange, and other regulatory agencies to the jurisdiction of which Apex Clearing are subject; and
- According to our sole discretion and judgment

You agree to maintain in your Margin and Short Account collateral of the type and amount required by:

- Applicable exchange rules and federal regulations
- Our Disclosure of Credit Terms and Policies; **or**
- As required by Apex Clearing, at Apex Clearing's discretion

Margin maintenance requirements may change without prior notice.

Apex Clearing may issue a "margin call" (that is, a notification to deposit additional collateral) if your account equity falls below the margin maintenance requirement. This can happen for various reasons. The most common reasons are a decrease in the value of long securities held as collateral or an increase in the value of securities held short.

As a general guideline and when it is practicable to do so, Apex Clearing may (but is not required to) issue a margin call when the equity in your Margin and Short Account falls below a predetermined percentage of the market value of assets at risk (that is, the sum of the market values of the long and short equity security positions) in your Margin and Short Account. The amount of additional collateral Apex Clearing requires usually is an amount sufficient to raise your equity to minimum standards. For information on the current equity requirements, please contact Apex.

Apex Clearing retains absolute discretion to determine whether, when and in what amounts Apex Clearing will require additional collateral. In some situations, Apex Clearing may find it necessary to require a higher level of equity in your account. For example, Apex Clearing may require additional collateral if an account contains:

- Only one security or a large concentration of one or more securities; or
- Low-priced, thinly traded, or volatile securities; or if
- Some of your collateral is or becomes restricted or non-negotiable or non-marginable

Apex Clearing also may consider market conditions and your financial resources.



Day-Trading Risk Disclosure Statement

You should consider the following points before engaging in a day-trading strategy. For purposes of this notice, a "day-trading strategy" means an overall trading strategy characterized by the regular transmission by a customer of intra-day orders to effect both purchase and sale transactions in the same security or securities.

Day trading can be extremely risky. Day trading generally is not appropriate for someone of limited resources and limited investment or trading experience and low risk tolerance. You should be prepared to lose all of the funds that you use for day trading. In particular, you should not fund day-trading activities with retirement savings, student loans, second mortgages, emergency funds, funds set aside for purposes such as education or home ownership, or funds required to meet your living expenses. Further, certain evidence indicates that an investment of less than \$50,000 will significantly impair the ability of a day trader to make a profit. Of course, an investment of \$50,000 or more will in no way guarantee success.

Be cautious of claims of large profits from day trading. You should be wary of advertisements or other statements that emphasize the potential for large profits in day trading. Day trading can also lead to large and immediate financial losses.

Day trading requires knowledge of securities markets. Day trading requires in-depth knowledge of the securities markets and trading techniques and strategies. In attempting to profit through day trading, you must compete with professional, licensed traders employed by securities firms. You should have appropriate experience before engaging in day trading.

Day trading requires knowledge of a firm's operations. You should be familiar with a securities firm's business practices, including the operation of the firm's order execution systems and procedures. Under certain market conditions, you may find it difficult or impossible to liquidate a position quickly at a reasonable price. This can occur, for example, when the market for a stock suddenly drops, or if trading is halted due to recent news events or unusual trading activity. The more volatile a stock is, the greater the likelihood that problems may be encountered in executing a transaction. In addition to normal market risks, you may experience losses due to systems failures.

Day trading will generate substantial commissions, even if the per trade cost is low. Day trading involves aggressive trading, and generally you will pay commission on each trade. The total daily commissions that you pay on your trades will add to your losses or significantly reduce your earnings. For instance, assuming that a trade costs \$16 and an average of 29 transactions are conducted per day, an investor would need to generate an annual profit of \$111,360 just to cover commission expenses.

Day trading on margin or short selling may result in losses beyond your initial investment. When you day trade with funds borrowed from a firm or someone else, you can lose more than

the funds you originally placed at risk. A decline in the value of the securities that are purchased may require you to provide additional funds to the firm to avoid the forced sale of those securities or other securities in your account. Short selling as part of your day-trading strategy also may lead to extraordinary losses, because you may have to purchase a stock at a very high price in order to cover a short position.

Potential Registration Requirements. Persons providing investment advice for others or managing securities accounts for others may need to register as either an "Investment Advisor" under the Investment Advisors Act of 1940 or as a "Broker" or "Dealer" under the Securities Exchange Act of 1934. Such activities may also trigger state registration requirements.

CUSTOMER ACCOUNT AGREEMENT

This Customer Account Agreement (the "Agreement") sets forth the respective rights and obligations of Apex Clearing Corporation ("you" or "your" or "Apex") and the Customer's (as defined below) brokerage firm (the "Introducing Broker"), and the customer(s) identified on the New Account Application (the "Customer") in connection with the Customer's brokerage account with the Introducing Broker ("the Account"). The Customer hereby agrees as follows with respect to the Account, which the Customer has established with the Introducing Broker for the purchase, sale or carrying of securities or contracts relating thereto and/or the borrowing of funds, which transactions are cleared through you. To help the government fight the funding of terrorism and money laundering, Federal law requires all financial institutions to obtain, verify, and record information that identifies each person who opens an account. In order to open an account, the Customer will provide information that will allow you to identify the Customer including, but not limited to, the Customer's name, address, date of birth, and the Customer's driver's license or other identifying documents.

1. Applicable Rules and Regulations.

All transactions for the Account 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.

"Obligations" means all indebtedness, debit balances, liabilities, or other obligations of any kind of the Customer 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.

3. Breach; Security Interest.

Whenever in your discretion you consider it necessary for your protection, or for the protection of the Customer's Introducing Broker or in the event of, but not limited to; (i) any breach by the Customer of this or any other agreement with you or (ii) the Customer'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 Customer'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 Customer, all without notice or demand for deposit of collateral, other notice of sale or purchase, or other notice or advertisement, each of which is expressly waived by the Customer, and/or you may require the Customer to deposit cash or adequate collateral to the Customer's account prior to any settlement date in order to assure the performance or payment of any open contractual commitments and/or unsettled transactions. You have the right to refuse to execute securities transactions for the Customer at any time and for any reason. Any and all securities and other property belonging to the Customer or in which the Customer may have an interest held by you or carried in any of the Customer'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 Customer'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 Customer's accounts, and/or to transfer any such securities and other property among any of the Customer's accounts to the fullest extent of the law and without notice where allowed. The losses, costs and expenses, including but not limited to reasonable attorneys' fees and expenses, incurred and payable or paid by you in the (i) collection of a debit balance and/or any unpaid deficiency in the accounts of the Customer with you or (ii) defense of any matter arising out of the Customer's securities transactions, shall be payable to you by the Customer. The Customer understands that because of circumstances beyond broker-dealers control, its customers' voting rights may be impaired. For example, if the stock of a company that another customer has purchased has not yet been received from the seller(s), then other customers' abilities to vote that company's stock could be impaired until those shares are received. In addition, if the stock of a company that the Customer has purchased has not yet been received from the seller(s), then payments received by the Customer from the Introducing Broker, in lieu of the dividends on that stock not yet received, may receive tax treatment less favorable than that accorded to dividends.

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 Customer, in whole or in part, or to close out any commitment made on behalf of the Customer.

5. Payment of Indebtedness Upon Demand.

The Customer shall at all times be liable for the payment upon demand of any obligations owing from the Customer to you, and the Customer 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 Customer; and the Customer shall make payment of such obligations upon demand.

6. Accounts Carried as Clearing Broker.

The Customer understands that you are carrying the accounts of the Customer as clearing broker by arrangement with the Customer's Introducing Broker through whose courtesy the account of the Customer has been introduced to you. Until receipt from the Customer of written notice to the contrary, you may accept from and rely upon the Customer'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 Customer's accounts. The Customer represents that the Customer understands that you act only to clear trades introduced by the Customer's Introducing Broker and to effect other back office functions for the Customer's introducing broker. The Customer confirms to you that the Customer is relying for any advice concerning the Customer's accounts solely on the Customer's Introducing Broker. The Customer understands that all representatives, employees and other agents with whom the Customer communicates concerning the Customer's account are agents of the Introducing Broker, and not your representatives, employees or other agents and the Customer will in no way hold you liable for any trading losses that the Customer may incur. The Customer 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 Customer understands that you will not review the Customer's accounts and will have no responsibility for trades made in the Customer'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 Customer initiates a claim against you in your capacity as clearing broker and does not prevail, the Customer shall be responsible for the costs and expenses associated with your defense of such claim. The Customer understands you shall be entitled to exercise and enforce directly against the Customer all rights granted to the Introducing Broker.

a. Accounts Carried as Custodian.

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

7. Communications.

You may send communications to the Customer at the Customer's address on the New Account Application or at such other address as the Customer may hereafter give you in writing, and all communications so sent, whether by mail, telegraph, or otherwise, shall be deemed given to the Customer personally, whether actually received or not. Reports of execution of orders and statements of accounts of the Customer 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 by mail or otherwise. In consideration of your sending any mail to me in care of a Post Office Box Address or a third party, I hereby agree that "all correspondence of any nature whatsoever" sent to me in such address will have the same force and effect as if it had been delivered to me personally.

8. 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 FORUM 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 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 Customer represents that the Customer is of majority age. The Customer represents either that the Customer 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, or alternatively, that the Customer has obtained and will provide to you additional documentation which may include information required under FINRA Rule 407 from its employer authorizing the Customer to open and maintain an account with you. If the Customer is a corporation, partnership, trust or other entity, the Customer represents that its governing instruments permit this Agreement, that this Agreement has been authorized by all applicable persons and that the signatory on the New Account Application is authorized to bind the Customer. The Customer represents that the Customer shall comply with all applicable laws, rules and regulations in connection with the Customer's account. The Customer further represents that no one except the Customer has an interest in the account or accounts of the Customer with you.

10. Joint Accounts.

If the New Account Application indicates that the Account shall consist of more than one person, the Customer's obligations under this Agreement shall be joint and several. References to the "Customer" shall include each of the customers identified on the New Account Application. You may rely on transfer or other instructions from any one of the Customers in a joint account, and such instructions shall be binding on each of the Customers. You may deliver securities or other property to, and send confirmations; notices, statements and communications of every kind, to any one of the Customers, and such action shall be binding on each of the Customers. 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 or securities. In the case of Tenants by the Entirety accounts, joint action will be required for all matters concerning the joint account. Tenants by Entirety is not recognized in certain jurisdictions, and, where not expressly allowed, will not be a permitted designation of the account.

11. Other Agreements.

If the Customer trades any options, the Customer agrees to be bound by the terms of your Customer Option Agreement. The Customer 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 Customer.

12. Data Not Guaranteed.

The Customer expressly agrees that any data or online reports is provided to the Customer 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 Customer 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 or 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 Customer or any third party for the accuracy, timeliness, or completeness of any information made available to the Customer or for any decision made or taken by the Customer 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. Payment for Order Flow Disclosure.

Depending on the security traded and absent specific direction from the Customer, equity and option orders are routed to market centers (i.e., broker-dealers, primary exchanges, or electronic communication networks) for execution. Routing decisions are based on a number of factors including the size of the order, the opportunity for price improvement and the quality of order executions, and decisions are regularly reviewed to ensure the duty of best execution is met. You or the Introducing Broker may receive compensation or other consideration for the placing of orders with market centers for execution. The amount of the compensation depends on the agreement reached with each venue. The source and nature of compensation relating to the Customer's transactions will be furnished upon written request.

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 Customer.

15. Miscellaneous.

If any provision of this Agreement is held to be invalid or 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 Customer 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 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 Customer to your successors and assigns. This Agreement shall be binding upon the Customer and the heirs, executors, administrators, successors and assigns of the Customer. Failure to insist on strict compliance with this Agreement is not considered a waiver of your rights under this Agreement. At your discretion, you may terminate this Agreement at any time on notice to the Customer, the Customer will continue to be responsible for any obligation incurred by the Customer prior to termination. The Customer may not assign the Customer's rights or delegate the Customer's obligations under this Agreement, in whole or in part, without your prior consent.

16. Sweep Program.

If the Customer elects to participate in one of your FDIC or money market sweep programs, the Customer acknowledges and agrees that: (a) the Customer has read and understands the sweep program terms and conditions and/or prospectuses available at www.apexclearing.com/disclosures/ and is aware of the products available in such sweep programs; (b) you may make changes to your FDIC and/or money market sweep programs and products at any time, in your sole discretion and with or without notice to Customer; (c) the free credit balances in the Customer's Account may begin being included in the sweep program upon Account opening; and (d) you have no obligation to monitor the applicable sweep program elected for the Customer's Account or to make recommendations about, or changes to, the sweep program that might be beneficial to the Customer.

17. SIPC Protection.

As a member of the Securities Investor Protection Corporation (SIPC), funds are available to meet customer claims up to a ceiling of \$500,000, including a maximum of \$250,000 for cash claims. For additional information regarding SIPC coverage, including a brochure, please contact SIPC at (202) 371-8300 or visit www.sipc.org. Apex has purchased an additional insurance policy through a group of London Underwriters (with Lloyd's of London Syndicates as the Lead Underwriter) to supplement SIPC protection. This additional insurance policy becomes available to customers in the event that SIPC limits are exhausted and provides protection for securities and cash up to certain limits. Similar to SIPC protection, this additional insurance does not protect against a loss in the market value of securities.

18. Tax Treaty Eligibility.

This agreement shall serve as the Customer's certification that you are eligible to receive tax treaty benefits between the country or (of) residence indicated on the new account form and the country (ies) of origin holding jurisdiction over the instruments held within the customer's account.

19. Trusted Contact.

"Under FINRA Rule 4512 Apex Clearing Corporation is required to disclose to you (the customer) that Apex Clearing Corporation or an associated person of Apex Clearing Corporation is authorized to contact the trusted contact person and disclose information about the customer's account to address possible financial exploitation, to confirm the specifics of the customer's current contact information, health status, or the identity of any legal guardian, executor, trustee or holder of a power of attorney, or as otherwise permitted by FINRA Rule 2165.

20. ACH Agreement.

If I request Automated Clearinghouse (“ACH”) transactions from my Account at Clearing Firm, I authorize Clearing Firm to originate or facilitate transfer credits/debits to/from my eligible bank account. Transactions sent through the NACHA network will be subject to all applicable rules of NACHA and all rules set forth in Federal Reserve Operating circulars or other applicable laws and regulations. ACH deposits to my brokerage account are provisional. If the beneficiary bank does not receive final and complete payment for a payment order transferred through ACH, the beneficiary bank is entitled to recover from the beneficiary any provisional credit and Clearing Firm may charge my account for the transaction amount. I understand Clearing Firm or my Broker may not notify me of any returned or rejected ACH transfers. I agree to hold Clearing Firm and Clearing Firm’s agents free of liability for compliance with these instructions. I hereby agree to hold harmless Clearing Firm and each of its affiliates, offices, directors, employees, and agents against, any claims, judgments, expenses, liabilities or costs of defense or settlement relating to: (a) any refusal or failure to initiate or honor any credit or debit request, by Clearing Firm or my Broker, whether (i) due to a lack of funds necessary to credit my account; (ii) due to inadvertence, error caused by similarity of account holder names or (iii) otherwise provided Clearing Firm has not acted in bad faith; (b) if the routing number is incorrect or the routing number or other information changes at another U.S. financial institution or (c) any loss, damage, liability or claim arising, directly or indirectly, from any error, delay or failure which is caused by circumstances beyond Clearing Firm’s direct control. To the extent permitted by applicable law or regulation, Clearing Firm hereby disclaims all warranties, express or implied, and in no event shall Clearing Firm be liable for any special indirect, incidental, or consequential damages whatsoever resulting from the ACH electronic service or any ACH transactions. Nothing in this herein shall constitute a commitment or undertaking by Clearing Firm or my Broker to effect any ACH transaction or otherwise act upon my instructions or those of my Broker with respect to any account at Clearing Firm. This authorization shall remain in full force and effect until I revoke authorization by written notification to my Broker that is forwarded to Clearing Firm. I understand that Clearing Firm has the right to terminate or suspend the ACH agreement at any time and without notice.

PRIVACY POLICY

Apex Clearing Corporation (“Apex”) carries your account as a clearing broker by arrangement with your broker-dealer or registered investment advisor as Apex’s introducing client. At Apex, we understand that privacy is an important issue for customers of our introducing firms. It is our policy to respect the privacy of all accounts that we maintain as clearing broker and to protect the security and confidentiality of non-public personal information relating to those accounts. Please note that this policy generally applies to former customers of Apex as well as current customers.

Personal Information Collected

In order to service your account as a clearing broker, information is provided to Apex by your introducing firm who collects information from you in order to provide the financial services that you have requested. The information collected by your introducing firm and provided to Apex or otherwise obtained by Apex may come from the following sources and is not limited to:

- Information included in your applications or forms, such as your name, address, telephone number, social security number, occupation, and income
- Information relating to your transactions, including account balances, positions, and activity
- Information which may be received from consumer reporting agencies, such as credit bureau reports
- Information relating to your creditworthiness
- Information which may be received from other sources with your consent or with the consent of your introducing firm

In addition to servicing your account, Apex may make use of your personal information for analysis purposes, for example, to draw conclusions, detect patterns or determine preferences.

Sharing of Non-public Personal Information

Apex does not disclose non-public personal information relating to current or former customers of introducing firms to any third parties, except as required or permitted by law, including but not limited to any obligations of Apex under the USA PATRIOT Act, and in order to facilitate the clearing of customer transactions in the ordinary course of business.

Apex has multiple affiliates and relationships with third party companies. Examples of these companies include financial and non-financial companies that perform services such as data processing and companies that perform securities executions on your behalf. We may share information among our affiliates and third parties, as permitted by law, in order to better service your financial needs and to pursue legitimate business interests, including to carry out, monitor and analyze our business, systems and operations.

Security

Apex strives to ensure that our systems are secure and that they meet industry standards. We seek to protect non- public personal information that is provided to Apex by your introducing firm or otherwise obtained by Apex by implementing physical and electronic safeguards. Where we believe appropriate, we employ firewalls, encryption technology, user authentication systems (i.e. passwords and personal identification numbers) and access control mechanisms to control access to systems and data. Apex endeavors to ensure that third party service providers who may have access to non-public personal information are following appropriate standards of security and confidentiality. Further, we instruct our employees to use strict standards of care in handling the personal financial information of customers. As a general policy, our staff will not discuss or disclose information regarding an account except; 1) with authorized personnel of your introducing firm, 2) as required by law or pursuant to regulatory request, or 3) as authorized by Apex to a third party or affiliate providing services to your account or pursuing Apex’s legitimate business interests.

Access to Your Information

You may access your account information through a variety of media offered by your introducing firm and Apex (i.e., statements or online services). Please contact your introducing firm if you require any additional information. Apex may use “cookies” in order to provide better service, to facilitate its customers’ use of the website, to track usage of the website, and to address security hazards. A cookie is a small piece of information that a website stores on a personal computer, and which it can later retrieve.

Changes to Apex's Privacy Policy

Apex reserves the right to make changes to this policy.

How to Get in Touch with Apex about this Privacy Policy

For reference, this Privacy Policy is available on our website at www.apexclearing.com. For more information relating to Apex’s Privacy Policy or to limit our sharing of your personal information, please contact:

Apex Clearing Corporation
Attention: Compliance
350 North St. Paul Street, Suite 1300
Dallas, Texas 75201
(214) 765-1055