

Customer Relationship Summary

1. Introduction

Firstrade Securities Inc. ("Firstrade" 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

Firstrade is an online discount broker-dealer that provides self-directed brokerage services and a complete suite of investment products. Firstrade **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.
- 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 Firstrade.

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

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 firstrade.com/pricing.
- **Exchange, Regulatory, and Clearing Fees:** Exchanges, clearing houses and regulators may charge Firstrade 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 and market data.
- **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 firstrade.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.

FTCRS202009 September 2020

- 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.

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:	• 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	

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 markers, and other third parties through whom Firstrade 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:	How might your conflicts of interest affect me, and how will you address them?	

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 <u>Investor.gov/CRS</u> for a free and simple search tool to research us and our financial professionals. Firstrade 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 <u>brokercheck.finra.org</u> for additional information.

5. Additional Information

You can find additional information about our services on our web site (<u>www.firstrade.com</u>). You can also request up-to-date information or a copy of the *relationship summary* by calling us at 800-869-8800.

Additional Information:	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, you can contact us at by email at service@firstrade.com .			
Conversation Starter:	• 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?			

FTCRS202009 September 2020



Entity Account Application - Corporation (Cash Account Only)

To Establish a Corporate Account:

Please complete:

•	New Account Entity – Application & Agreement	Page 1 – 3
•	Certification of Beneficial Owner(s) & Entity Officer(s)	Page 5 – 6
•	Corporate Account (Cash Account Only – Limited Authority) Agreement	Page 13
•	Entity Account Authorized Agent/ Trustee/ Officer Information	Page 14
•	Entity Account Due Diligence Questionnaire	Page 15 -17

Please provide:

- Copy of the Certificate of Incorporation
- Copy of a valid government issued ID for all authorized agents or officers, include but not limited to President, Vice President, Treasurer, Secretary, etc.

Account Requirements:

- Initial minimum deposit is \$500.00
- Account opening fee is \$100.00

Please mail your entity account application with a check deposit to:

Firstrade Securities Inc. 30-50 Whitestone Expressway, Suite A301 Flushing, New York 11354

If you have any questions, please contact our Customer Service Group at 1-800-869-8800 or email us at service@firstrade.com



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

NEW ACCOUNT ENTITYAPPLICATION & AGREEMENT

I (We) would like to open a brokerage account with Apex Clearing Corporation.

ACCOUNT INFORMATION (NOTE: ALL INFORMATION MUST BE COMPLETED. PLEASE TYPE OR PRINT)

BRANCH-ACCOUNT NUMBER	
REGISTERED REP CODE	

A CCOUNT TYPE	CASH (Customer Account Agreement following this application)						
ACCOUNT TYPE	MARGIN (Request Margin & Truth in Lending Agreements)	OPTIONS (Request Option	Agreement)				
	PARTNERSHIP (Request Partnership Agreement)	INVESTMENT CLUB (Requ	INVESTMENT CLUB (Request Investment Club Agreement)				
	C-CORPORATION (Request Corporate Resolution)	S-CORPORATION (Reques	st Corporate Resolution)				
CUSTOMER TYPE	STATUTORY/BUSINESS TRUST FOREIGN FINANCIAL INSTITUTION						
	FOREIGN BANK (Request Foreign Certificate Regarding Foreign	Banks)					
	LIMITED LIABILITY COMPANY (Request LLC Agreement. Enter	r the tax classification:) (C =	= C-Corporation, S = S-Corporati	on, P = Partnership)			
	ENTITY NAME	AX ID NO.					
	BUSINESS ADDRESS	CITY	STATE	ZIP CODE			
	AUTHORIZED SIGNER	E-MAIL ADDRESS					
	AO MONZED SIGNEN	L-IVIAIL ADDICESS					
	DATE OF BIRTH SOCIAL SECURITY NO.	U.S. CITIZEN YES NO	IF NO, WHAT	COUNTRY?			
	BUSINESS TELEPHONE NO.		MAIL TO (Check One)	U.S. ENTITY			
	- FANANCE		MAILING BUSINESS	YES			
	FAX NO.		P.O. BOX	NO			
	MAILING ADDRESS (If Different than Business Address)	CITY	STATE	ZIP CODE			
ACCOUNT	ATTENTION:						
INFORMATION	TRADING AUTHORITATION TO ANOTHER PARTY						
	TRADING AUTHORIZATION TO ANOTHER PARTY Make sure to request the Trading Authorization Form from your introducing broker-dealer to grant trading authority to a third party.						
	IS THE ACCOUNT HOLDER A CONTROL PERSON OF A PUBLICLY TRADED COMPANY? (Director, Officer, or 10% Stock Holder)						
	YES NO If Yes, Please list the name of the company(s) and the stock ticker symbol I (We) promise to notify you of any change.						
	ARE YOU, OR ANYONE AUTHORIZED TO TRADE IN YOUR ACCOUNT, AFFILIATED WITH OR WORK WITH OR WORK FOR A MEMBER FIRM OF A STOCK EXCHANGE OR FINRA?						
	YES NO If Yes, Name of Firm:						
	TO BE ANSWERED IF THE ACCOUNT HOLDER IS A BROKER DEALER (WI BROKER OR DEALER): IS THIS ACCOUNT A PAB ACCOUNT, MEANING A						
	SEC 15C3-3(A)(16)?	THO THE PART SECONTIES ACCOU	ON OF A BROKEN ON BEAU	EEN 713 DET IIVED DT			
	YES NO (Selection Required) If "yes," please complete a "New Account Form for Proprietary Account Broker (P	AB) form, along with a "New Account A	Application Entity" form.				
	NOTE: The New Account Form is not sufficient to have a proprietary account of IS THE ACCOUNT MAINTAINED FOR A CURRENT OR FORMER POLITICA	· · · · · · · · · · · · · · · · · · ·					
	OFFICIAL? (Includes U.S. & Foreign Individuals)						
	IF YES, PLEASE PROVIDE THE NAME(S) OF THAT OFFICIAL AND MEMBERS. (Including Former Spouses)	OFFICIAL & IMMEDIATE FAMILY MEMBER(S)					
	IF YES, PLEASE PROVIDE THE NAME OF THE RELATED POLITICAL OR	GANIZATION.	POLITICAL ORGANIZATION				
ADDITIONAL	IS THE ACCOUNT MAINTAINED FOR A FOREIGN FINANCIAL INSTITUTION	ON AS DEFINED BY TITLE 31 OF	<u> </u>				
ACCOUNT	THE CODE OF FEDERAL REGULATIONS? (If Yes, Please complete the "Foreign Financial Institution Due Diligence Questionn	aire" Form)	L YES L	NO			
INFORMATION	IS THE ACCOUNT A FOREIGN BANK ORGANIZED UNDER FOREIGN LAW UNITED STATES AS DEFINED BY TITLE 31 OF THE CODE OF FEDERAL RE						
	(If Yes, Please ensure the "Certification Regarding Correspondent Accounts" is Financial Institution Due Diligence Questionnaire" Form)		YES	NO			
	NOTE: Broker-Dealers are prohibited from establishing, maintaining, administering, or United States for Foreign Shell Banks. The prohibition does not include Foreign Shell Ba						
	IF YES, PLEASE LIST U.S. AGENT FOR SERVICE OF PROCESS.	U.S. AGENT					

CLUTABILITY	TIME HORIZON (The number of years planned to achieve a particular	LIQUIDITY NEEDS (The ability to quickly and easily convert all or a portion of the account assets into cash without experiencing significant loss)					
SUITABILITY INFORMATION	Short (Less than 3 Years) (01) Long (8 Years+) (03) Average (4-7 Years) (02)		Very Important (01) Somewhat Important (02) Not Important (03)		Not Important (03)		
	INVESTMENT ORIECTIVE	STMENT RIENCE	ANNUAL IN	COME (From all s	OME (From all sources)		
	Growth & Income (02) Growth (03) Growth (03)	ne (00) ited (01) od (02) ensive (03)	Under \$25,000 (01) \$25,001 to \$50,000 (02) \$50,001 to \$100,000 (03) \$100,001 to \$200,000 (23)	\$300,00 \$500,00	1 to \$300,000 (24) 1 to \$500,000 (25) 1 to \$1,200,000 (26) 200,001 (27)		
INVESTMENT PROFILE	LIQUID NET WORTH (Cash & Liquid Investments only)	_	AL NET WORTH luding Residence)	RIS	K TOLERANCE		
	Under \$50,000 (01) \$50,001 to \$100,000 (02) \$100,001 to \$200,000 (22) \$200,001 to \$500,000 (23) \$500,001 to \$1,000,000 (24) \$1,000,001 to \$5,000,000 (25) Over \$5,000,001 (26)	\$100,001 \$200,001 \$500,001 \$1,000,00	0,000 (01) 0 \$100,000 (02) to \$200,000 (22) to \$500,000 (23) to \$1,000,000 (24) 11 to \$5,000,000 (25) 00,001 (26)	Low (01) Medium (High (03) Tax Bracket:	['] / _' 02)		
LARGE TRADER ID	LARGE TRADER ID (Please provide if you have been assigne	d previously for any of	your accounts)	EFFECTIVE DATE			
ENHANCED ACCOUNT FEATURES	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 later by calling your investment representative. PLEASE SELECT ONE OF THE FOLLOWING OPTIONS: Reinvest dividends on ALL eligible securities. Please do not reinvest any dividends. 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 SEE YOUR INVESTMENT REPRESENTATIVE FOR ENROLLMENT INFORMATION.						
SERVICE INSTRUCTIONS (Voluntary Sweep Program)	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. YES						
DIRECT COMMUNICATION RULE 14b-1(c)	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. Yes, I do object to the disclosure of such information.						
	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 (See Instructions)						
W-9	withholding as a result of a failure to report all intersubject to backup withholding, and (3) I am a U.S. citi	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) (If Any): entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.					
CERTIFICATION	Definition of a U.S. person. For federal tax return pur is a U.S. citizen or U.S. resident alien, A partnership United States or under the laws of the United States, a in Regulations section 301.7701-7).	, corporation, comp an estate (other than	pany, or association created or a foreign estate), or a domestic	organized in the trust (as defined	EXEMPTION FROM FATCA REPORTING CODE (If Any):		
	The Internal Revenue Service does not require your consent to any provisions of this document other than the certifications required to avoid backup withholding.						

	IS THE ACCOUNT MAINTAINED FOR LEGAL ENTITY CUSTOMERS WHO ARE EXEMPT FROM IDENTIFYING AND VERIFYING BENEFICIAL OWNERS AS DEFINED UNDER 31 CFR 1010.230 (E) (2-3)? (See list below of Apex Acceptable Exemptions)						
	IF YES, SELECT THE EXEMPTION BELOW; IF NO PLEASE COMPLETE THE ATTACHED EXHIBIT ENTITLED "ENTITY CERTIFICATION REGARDING BENEFICIAL OWNERS OF LEGAL ENTITY CUSTOMERS" AND THE "ENTITY ACCOUNT DUE DILIGENCE QUESTIONNAIRE" WILL ALSO NEED TO BE COMPLETED.						
	A FINANCIAL INS	A FINANCIAL INSTITUTION REGULATED BY A FEDERAL FUNCTIONAL REGULATOR OR A BANK REGULATED BY A STATE BANK REGULATOR;					
	A DEPARTMENT OR AGENCY OF THE UNITED STATES, OF ANY STATE, OR OF ANY POLITICAL SUBDIVISION OF ANY STATE;						
	i i	HER THAN A BANK) WHOSE COMMON EXCHANGE (EACH, A LISTED ENTITY);	I STOCK OR ANAL	OGOUS EQUITY INTERESTS ARE LISTED (ON THE NEW YORK, AMERICAN OR		
EXEMPT LEGAL	AN ISSUER OF A		ER SECTION 12 O	F THE SECURITIES EXCHANGE ACT OF 1	934 OR THAT IS REQUIRED TO FILE		
	AN INVESTMENT			MENT COMPANY ACT OF 1940, THAT IS	REGISTERED WITH THE SECURITIES		
ENTITY CUSTOMER		ADVISOR, AS DEFINED IN SECTION 20	·	INVESTMENT ADVISORS ACT OF 1940, 7	THAT IS REGISTERED WITH THE SEC		
	AN EXCHANGE OR CLEARING AGENCY, AS DEFINED IN SECTION 3 OF THE SECURITIES EXCHANGE ACT OF 1934, THAT IS REGISTERED UNDER SECTION 6 OR 17A OF THAT ACT;						
	ANY OTHER ENT	ITY REGISTERED WITH THE SEC UNDER	R THE SECURITIES	EXCHANGE ACT OF 1934;			
	MAJOR SWAP PA			RADING ADVISOR, RETAIL FOREIGN EXC OMMODITY EXCHANGE ACT, THAT IS RE			
	A PUBLIC ACCOL	JNTING FIRM REGISTERED UNDER SEC	TION 102 OF THE	SARBANES-OXLEY ACT;			
	AN INSURANCE COMPANY THAT IS REGULATED BY A STATE.						
	I authorize Apex Clearing Corporation ('Apex") 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, Apex 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, as a result of the consumer report verification, I authorize Apex to provide to my introducing broker the reason(s) for such denial.						
SIGNATURES	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 AMOONG 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 AND CORRECT.						
	SIGNATURE			DATE			
	SIGNATURE			DATE			
	FIRSTRADE	[IB] REGISTERED PRINCIPAL SIGNA	TURE				
					CUSTOMER I.D. VERIFIED (Must be completed)		
	[IB] REGISTERED REPRE	ESENTATIVE SIGNATURE		DATE OPENED	Yes		
	FDID (If you would like to designate the FDID, please provide it here. Otherwise an ID will be assigned at account opening)						
FOR OFFICE USE	CAT ACCOUNT TYPE (Selection Required)		OATS ACCOUNT TYPE				
	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 CS V - Firm Agency Average Price Account P - Other Proprietary		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				

EXHIBIT - ENTITY CERTIFICATION REGARDING BENEFICIAL OWNERS OF LEGAL ENTITY CUSTOMERS

I. GENERAL INSTRUCTIONS

What is this form?

To help the government fight financial crime, Federal regulation requires certain financial institutions to obtain, verify, and record information about the beneficial owners of legal entity customers. Legal entities can be abused to disguise involvement in terrorist financing, money laundering, tax evasion, corruption, fraud, and other financial crimes. Requiring the disclosure of key individuals who own or control a legal entity (i.e., the beneficial owners) helps law enforcement investigate and prosecute these crimes.

Who has to complete this form?

This form must be completed by the person opening a new account on behalf of a legal entity with any of the following U.S. financial institutions: (i) a bank or credit union; (ii) a broker or dealer in securities; (iii) a mutual fund; (iv) a futures commission merchant; or (v) an introducing broker in commodities. For the purposes of this form, a legal entity includes a corporation, limited liability company, or other entity that is created by a filing of a public document with a Secretary of State or similar office, a general partnership, and any similar business entity formed in the United States or a foreign country. Legal entity does not include sole proprietorships, unincorporated associations, or natural persons opening accounts on their own behalf.

What information do I have to provide?

This form requires you to provide the name, address, date of birth and Social Security number (or passport number or other similar information, in the case of non- U.S persons) for the following individuals (i.e., the beneficial owners):

- (i) Each individual, if any, who owns, directly or indirectly, 10 percent or more of the equity interests of the legal entity customer (e.g., each natural person that owns 10 percent or more of the shares of a corporation); and
- (ii) An individual with significant responsibility for managing the legal entity customer (e.g., a Chief Executive Officer, Chief Financial Officer, Chief Operating Officer, Managing Member, General Partner, President, Vice President, or Treasurer). The number of individuals that satisfy this definition of "beneficial owner" may vary. Under section (i), depending on the factual circumstances, up to four individuals (but as few as zero) may need to be identified. Regardless of the number of individuals identified under section (i), you must provide the identifying information of one individual under section (ii). It is possible that in some circumstances the same individual might be identified under both sections (e.g., the President of Acme, Inc. who also holds a 30 percent equity interest). Thus, a completed form will contain the identifying information of at least one individual (under section (ii)), and up to ten individuals (i.e., one individual under section (ii) and ten 10 percent equity holders under section (i)). The financial institution may also ask to see a copy of a driver's license or other identifying document for each beneficial owner listed on this form.

II. CERTIFICATION OF BENEFICIAL OWNER(S) & ENTITY OFFICER(S)

	Persons opening an accou	Persons opening an account on behalf of a legal entity must provide the following information:					
	NAME AND TITLE OF NATURAL PERSON OPENING ACCOUNT:						
	NAME, TYPE AND ADDRES ACCOUNT IS BEING OPEN		FOR WHICH THE				
			l, if any, who, directly or indirectly or more of the equity interests of		t, arrangement, understanding, bove.		
	NAME	DATE OF BIRTH	ADDRESS (Residential Address)	FOR U.S. PERSONS: SOCIAL SECURITY NUMBER	FOR NON-U.S. PERSONS SOCIAL SECURITY NUMBER: PASSPORT NUMBER AND COUNTRY OF ISSUANCE, OR OTHER SIMILAR IDENTIFICATION NUMBER ¹		
CERTIFICATION OF BENEFICIAL							
OWNER(S)							
	The following information for each individual with significant responsibility for managing the legal entity listed above including entity officers, such as: • An executive officer or senior manager (e.g., Chief Executive Officer, Chief Financial Officer, Chief Operating Officer, Managing Member, General Partner, President, Vice President, Treasurer); or • Any other individual who regularly performs similar functions. [If appropriate, an individual listed under section (c) above may also be listed in this section (d)]						
CERTIFICATION OF ENTITY OFFICER(S)	NAME	DATE OF BIRTH	ADDRESS (Residential Address)	FOR U.S. PERSONS: SOCIAL SECURITY NUMBER	FOR NON-U.S. PERSONS SOCIAL SECURITY NUMBER: PASSPORT NUMBER AND COUNTRY OF ISSUANCE, OR OTHER SIMILAR IDENTIFICATION NUMBER ²		

¹ In lieu of a passport number, Non-U.S. Persons may also provide a Social Security Number, an alien identification card number, or number and country of issuance of any other government-issued document evidencing nationality or residence and bearing a photograph or similar safeguard.

² In lieu of a passport number, Non-U.S. Persons may also provide a Social Security Number, an alien identification card number, or number and country of issuance of any other government-issued document evidencing nationality or residence and bearing a photograph or similar safeguard.

CERTIFICATION OF ENTITY OFFICER(S)	NAME	DATE OF BIRTH	ADDRESS (Residential Address)	FOR U.S. PERSONS: SOCIAL SECURITY NUMBER	FOR NON-U.S. PERSONS SOCIAL SECURITY NUMBER: PASSPORT NUMBER AND COUNTRY OF ISSUANCE, OR OTHER SIMILAR IDENTIFICATION NUMBER ³
NATURE OF ACCOUNT	Please indicate the Industrial Classification your business is classified under below: (1) Agriculture, Forestry, and Fishing (2) Mining (3) Construction (4) Manufacturing (5) Transportation, Communications, Electric, Gas, and Sanitary Services (6) Wholesale Trade (7) Retail Trade (8) Finance, Insurance, and Real Estate (9) Services (10) Public Administration				
SIGNATURES	I, (name of natural person opening account), hereby certify, to the best of my knowledge, that the information provided above is complete and correct. SIGNATURE LEGAL ENTITY IDENTIFIER (Optional)				
FOR OFFICE USE ONLY	I,, am not aware of facts that could reasonably call into question the reliability of the above information provided by the applicant. SIGNATURE DATE				

³ In lieu of a passport number, Non-U.S. Persons may also provide a Social Security Number, an alien identification card number, or number and country of issuance of any other government-issued document evidencing nationality or residence and bearing a photograph or similar safeguard.

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.
 - a. **Investment Objective Definitions.** "Capital Preservation" a conservative investment strategy characterized by a desire to avoid risk of loss; "Income" strategy focused on current income rather than capital appreciation; "Growth" investing in stocks with strong earnings and/or revenue growth or potential; "Speculation" taking larger risks, usually by frequent trading, with hope of higher than-average gain. All strategies involve various types and levels of risk, the most common of which are market, credit, inflation, business and interest rate.
- 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 brokerdealers 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.
- 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:

- 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 of completeness. Such information could include technical or other inaccuracies, errors or omissions. In no event shall you or any of your affiliates be liable to the 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 http://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 Attn: Compliance Department 350 N. St. Paul St., Suite 1300 Dallas, Texas 75201 214-765-1055 69057P-NEWF 07/02/2020



CORPORATION ACCOUNT:

(Cash Accounts Only - Limited Authority)

Account Number:

To be completed if Customer is a Corporation.

I HEREBY CERTIFY that at a meeting, duly called, of the Board of Directors of				
the following preamble and resolution was adopted Corporation is duly authorized and permitted by it THEREFORE BE IT RESOLVED that this Corporation operirm"), to be carried by Apex Clearing Corporation ("Candon behalf of this Corporation, (1) give orders in the bonds, and other securities, (2) instruct, deliver to, or securities, (3) sign acknowledgements of the corrections.				
accounts covered by this agreement and authorizati benefit of the Introducing Firm's and the Clearing Brown	rned by the laws of the State of Texas, shall cover individually and collectively all on which the undersigned may open or reopen with you, and shall inure to the oker's present organization, and any successor organization, irrespective of any of for any cause whatsoever, and of the assigns of the Introducing Firm's and the cor organization.			
Very Truly Yours,				
Authorized Officer's Signature	Date			
Authorized Officer's Printed Name	Title			
that each of the Officers of the customer entity has be New Account Application & Agreement.	undersigned Secretary of the Corporation (or equivalent officer), hereby certify en duly elected and is now legally holding the office set forth in the undersigned's er, on behalf of the Customer, have hereunto affixed my hand of said Corporation			
Secretary's Signature (Secretary of Customer, a Corporati	on) Secretary's Printed Name			

(THIS CERTIFICATE MUST BE EXECUTED BY AN OFFICER OTHER THAN ONE AUTHORIZED TO ACT)



Entity Account Application Authorized Agent/Trustee/Officer Information

Name:					
Title in Organization: (President, Trustee, Partne	r, Executor, etc.)				
Social Security Number:		 			
Date of Birth: (Month/Day/Year)					
Marital Status:	() Single () Married () Divorced () Widowed		
Home Address:					
	City	State	Zip Code		
Telephone:					
Employer:					
Occupation/Position:		Years Employe	ed:		
Type of Business:					
Employer Address:					
	City	State	Zip Code		
Telephone:			-		
() Check here if you, or a business associate, are a director, 10% shareholder, or policy-making officer of a publicly traded company. If so, identify the company name, address, and position held:					
() Check here if you, or a business associate, are licensed or employed by a registered broker/dealer or registered investment advisor. If so, identify the company name, address, and position held:					
() Check here if you, any member of your immediate family, is a Senior Foreign Political Figure. If so, identify the name of the official, office held, relationship to account owner, and country:					

^{***} Please enclose a copy of Authorized Agent's government issued ID (driver's license/passport).



Entity Account Due Diligence Questionnaire

Account Name:	Account Number:			
Country of Incorporation:				
Geographic location(s) in which business is conducted:				
Officers of the entity/organization (Beneficial Owners, Signatories, Guarantors):				
Does this outituies us heaver shares? / _ \Vec /) No			
Does this entity issue bearer shares? () Yes, () No			
Does this entity or officer have other account held with Firstrade? () Yes, () No If yes, list the related account number(s) and name(s):				
Account Number: Accoun	nt Name:			
Account Number: Account				
Account Number:Accoun	t Nume.			
Are any direct/indirect owners, or members of seni etc.) of this entity, current or former Politically Expo	or management (i.e. Chairman, President, CEO, CFO, osed Person or Foreign Public Official?			
If yes, please complete the table below by providing immediate family members (including former spous	-			
Name of Official(s)& Role Within Entity:	Political Title & Organization:			
Immediate Family Members and Former Spouses:				
, , , , , , , , , , , , , , , , , , , ,				
Does the entity/organization conduct business outside of the country in which it is incorporated? () Yes, () No If yes, list the countries:				



Is the business owned by any another Entity? () Yes, () No If yes, list their names and locations:
Are any non-listed parties with the ability to manage or control the account? () Yes, () No If yes, list their names, titles, and locations:
What is the scope of your business? () Commercial/Retail business () Financial Service business () Other – indicate type:
Please include a brief explanation of your business:
Provide the primary source of funds that will be deposited to the account: () Corporate Income () Investment Capital () Other – indicate type:
What will be the primary type of account activity? () Active Trading () Short – term Investing () Long – term Investing
What will be the primary type of stock anticipating of trading? () Listed stocks () OTC BB, Pink Sheet Stocks Provide stock symbols: What Percentage? () Foreign Bonds
Which countries? Percentage for each country:
Investment Reference: Years trading stocks: Number of stock trades per year:
Years trading options: Number of option trades per year:
\$ Value of average size of option transactions:
Client has traded with following financial institutions:



Provide the name of your primary banking relationship: if more than one list all (i.e. Citibank, Wells Fargo, HSBC, etc.)				
What will be the initial deposit type? (Deposit of phy another financial institution, other – specify)	rsical certificate, wire, account transfer from			
What is the source and expected amount of the initial Deposit Amount	al deposit?			
Source of Deposit				
Describe the expected withdrawals from the account: () Frequent () Occasional () Rare The due diligence was completed and certified by the authorized agent/trustee/officer listed on the above entity/organization. Name/Title: Signature: Date:				
For Office Use Only:	Founier financial institution / No. / No.			
Entity issues bearer shares - () Yes () No Due diligence review - () Yes () No	Foreign financial institution - () Yes () No Exceptional, negative info () Yes () No			
Risk rating review - () high () medium () low	Follow up review - () Yes () No			
Additional Notes:	().55 ().75			
Review Date:	Review By:			



Firstrade Account Agreement

Member FINRA & SIPC

1. General Information

This form contains important Information about your Firstrade Securities Inc. ("Firstrade") 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 Firstrade Cash Account, you may elect to establish a Margin Account and/or Option Account. This information applies to all of your accounts with Firstrade, including cash, margin and option accounts. Upon approval, Firstrade will act as your broker for the purpose of transacting buy and/or sell orders for securities as instructed by you. You agree that Firstrade 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 Firstrade 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 Firstrade 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 Firstrade, in its sole discretion, deems to be disruptive to the securities markets, unusual in size, type or credit risk or which exceeds Firstrade'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 Firstrade. 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.

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 l6th 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 deem 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 Firstrade 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 Firstrade 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

This disclosure statement is being provided to all clients of Firstrade, as required by Rule 11A of the Securities and Exchange Commission. "Order Flow" refers to the process by which your securities transactions are executed. **Order Flow Payment Information:** Firstrade and Apex (which provides securities clearing and execution services for Firstrade) may receive remuneration in the form of payments for directing securities transactions to designated exchanges, market makers, dealers or market centers for execution. Such remuneration may take the form of rebates, monetary compensation or a reduction in exchange specialist fees based on volume and is considered to be compensation to Firstrade and Apex. The source and amount of any remuneration or compensation received by Firstrade and Apex in connection with a specific transaction will be disclosed upon written request.

Order Execution Routing Information: Absent specific instructions from customers, Apex routes most orders in overthe-counter ("OTC") securities to designated OTC market makers or third-market dealers based on an alphabetical selection process performed by a computerized system. Selected exchange-traded securities may be routed to affiliated specialists, regional exchanges or designated third-market dealers. All orders are routed to an exchange, market maker, dealer or market center that matches or improves upon the displayed national best bid or offer for the particular security at the time the order is processed. Price improvement opportunities or execution at prices superior to the displayed national best bid or offer, are available for certain transactions in NASDAQ and listed securities from certain of the OTC market makers and third-market dealers to which orders are routed.

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.firstrade.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, Firstrade Securities Inc. is required to disclose to you (the customer) that our clearing firm, Apex Clearing Corporation or an associated person of Firstrade 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 Firstrade 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 Firstrade 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 Firstrade may charge my account for the transaction amount. I understand Apex or Firstrade may not notify me of any returned or rejected ACH transfers. I agree to hold Firstrade, Apex and Apex's agents free of liability for compliance with these instructions. I hereby agree to hold harmless Firstrade, 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 Firstrade, 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 Firstrade 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 Firstrade's direct control. To the extent permitted by applicable law or regulation, Apex and Firstrade hereby disclaims all warranties, express or implied, and in no event shall Apex or Firstrade 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 Firstrade to effect any ACH transaction or otherwise act upon my instructions or those of Firstrade with respect to any account at Apex. This authorization shall remain in full force and effect until I revoke authorization by written notification to Firstrade that is forwarded to Apex. I understand that Apex and Firstrade has the right to terminate or suspend the ACH agreement at any time and without notice.



Self-directed Trading Account Risk Disclosure

All Firstrade 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 Firstrade agrees that neither Firstrade 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.



ELECTRONIC SERVICES AGREEMENT

Please read this Electronic Services Agreement before using any of the electronic services made available by Firstrade 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 Firstrade Securities Inc. states the terms and conditions regarding your use of any Electronic Service offered by Firstrade Securities Inc. and other authorized third party service providers, including the use of such services to enter transactions in your Firstrade Securities Inc. brokerage account. Your use of Firstrade 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 Firstrade Securities Inc. Account Agreement and Information Guide furnished to you and by using Firstrade 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 Firstrade Securities Inc.'s Electronic Services will be defined as any electronic or interactive product or service offered by Firstrade Securities Inc. which allows Firstrade Securities Inc. clients to: communicate with Firstrade Securities Inc. or an authorized third-party service provider: to obtain information or quotations from Firstrade Securities Inc. or an authorized third-party service provider; or enter into brokerage transactions with Firstrade Securities Inc. includes electronic data communications transmitted by you to Firstrade 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 Firstrade 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. Firstrade 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 Firstrade Securities Inc.'s electronic brokerage services. You acknowledge that Firstrade 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 Firstrade Securities Inc. and/or Apex Clearing in connection with trades effected by you in your Firstrade Securities Inc. brokerage account(s) through Firstrade Securities Inc.'s Electronic Services. Such brokerage commissions, fees, margin interest charges and payments will be paid directly to Firstrade Securities Inc. in accordance with the terms and conditions specified in the Firstrade Securities Inc. Account Agreement and Information Guide. You agree that Firstrade Securities Inc. may require a deposit before you can begin trading using Firstrade 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 Firstrade Securities Inc.'s Electronic Services, including, without limitation those of any third-party information providers offered through Firstrade 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, through, 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 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@firstrade.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.firstrade.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, <u>Apex Clearing Corporation's Margin Disclosure Statement</u> for additional margin information and credit terms & policies.



The applicable margin interest rate is the rate for all daily adjusted debit balances as communicated above. 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, we or Apex will give you written notice at least 30 days prior to that change.

Compounding Interest Charges. Interest compounds on a monthly basis. Interest charges will accrue to your account each month. Apex will include the charges in the next day's opening debit balance. 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 we 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 non-equity 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 may impose anytime and without prior notice more stringent requirements on positions that in its 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 Apex's discretion, it 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 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 we are subject: and
- According to Apex's sole discretion and judgement.

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

- Applicable exchange rules and federal regulations; and
- Our Disclosure of Credit Terms and Policies; or
- As required by Apex, at its discretion.

Margin maintenance requirements may change without prior notice.

We or Apex 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, we or Apex may (but are 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 we require usually is an amount sufficient to raise your equity to minimum standards. For information on the current equity requirements, please contact us at [INSERT CONTACT INFO OR WEB LINK].

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



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.