

20 Headquarters Plaza Morristown, NJ 07960 1.888.577.3123

Thank you for your interest in Lightspeed. On the pages that follow, you will find the forms required for opening a Corporation account. Some of the forms can be ignored depending on whether your account is for a Domestic (U.S.) or Foreign (non-U.S.) corporation. These items are specified below.

To help the federal 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, date of birth, and other information that will allow us to identify you and the entity on behalf of which you are applying for an account. We may request a copy of your driver's license or other personal identifying documents. A Corporation, Partnership, Limited Liability Company, Trust or other legal entity will need to provide other information, such as its principal place of business, employer identification number, articles of incorporation, operating agreement, trust agreement, or additional pertinent entity documents.

What Will Happen if I Do Not Provide the Information Requested:

We may not be able to open an account or carry out instructions for you. If an account has already been opened for you, we may have to close it.

Please complete the required forms* and return them with copies of these additional items to the address below:

- Executed copy of the Articles of Incorporation
- Government-issued photo ID for all officers/members/authorized individuals

*All forms should be signed in the capacity noted in your Articles of Incorporation (i.e. John Doe, President; Jane Doe, Manager; etc.)

How to Fund Your Account:

You may fund your account as soon as you receive your account number, and you will be able to begin trading within 24 hours of funding your account. *Please note that deposits are only accepted from like-named accounts, and funds deposited via check may be subject to a five-business-day hold. Cashier checks and money orders are not accepted.

Foreign / Domestic Paperwork Guide	SUBMIT	DISCARD
Domestic (U.S.) Corporations	Form W-9 (p.14-19 of 74)	W-8BEN-E (p.20 -27 of 74) Foreign Fin. Inst. Quest. (p. 31 of 74)
Foreign (Non-U.S.) Corporations	W-8BEN-E (p.20-27 of 74) Foreign Fin. Inst. Quest. (p. 31 of 74)	Form W-9 (p.14-19 of 74)
	Return Original Paperwork by Mail to:	
	Lightspeed Financial Services Grou	qu
	20 Headquarters, Plaza North Tov	ver, 7 th Floor
	Morristown, NJ 07960	
	Attn: Account Services	

Please call us at 1-888-LSPD-123 (1-888-577-3123) or 1-646-393-4800, or e-mail NewAccounts@lightspeed.com with any additional questions.

20 Headquarters, Plaza North Tower, 7th Floor f: 212-656-1195 Morristown, NJ 07960 p: 888-577-3123

ACCOUNT APPLICATION

For Office Use Only: I * Please indicate information	E n being updat	ed:	Account	Number:			New Acco	ount	Update to	Existing Account*
1. ACCOUNT TYPE:	Dlagga ah	ook ono hor	r oply							
	Please che		ž	. 1.)		<i>4</i> · · · · · · · · · · · · · · · · · · ·			•,	
 Individual Custodian for Minor 			rights of su poration	rvivorship)		(tenancy in common) rporation		Dint (c		property**)
Sole Proprietorship			/Conservat	orshin	\square LLC/			Volunt	snip arv Associa	tion
Personal Trust			ment Trust		Other					
** For AZ, CA, ID, LA, NV, I	NM TX WA							 IRA (Must accompany form I) KEOGH (Contact Retirement Service) 		
2. ACCOUNT INFOR		and wronny.						L KLOU	II (Conider	-
FULL TITLE OF ACCOU	NT.					TAXPAYER ID	NUMBER:			
						OP	TIONAL A	CCOUN	Γ FEAT	URES
							CREDIT	PLUS® AC	COUNT	
						Check w	riting and Wedl	oush Gold C	ard	Yes
						(If yes	s, please comple	ete form CP)		🗌 No
								ON ACCO		
						If you wish to trac			the Option.	
							Agreemen	t		□ No
3. APPLICANT INFO	RMATIO	N: This se	ection m	ust be completed :	for all ac	count types				
Primary App	licant and/or	Beneficial Ov	wner Infor	mation			Co-Applicant	Informatio	n	
Full Legal Name					Full Leg	al Name				
First Mic		Las	t	Suffix	First	Mic		Las	t	Suffix
Home Street Address (Canno	ot be a P.O. Bo	x)			Home St	reet Address (Canno	ot be a P.O. Box)		
										1
City			State	Zip	City				State	Zip
Mailing Address (If different	from above. I	P.O. Box may	be used)		Mailing	Address (If different)	from above. P.	O. Box may l	be used)	
City			State	Zip	City				State	Zip
Home Phone	Alternate Pl	hone	Fax		Home Pl	none	Alternate Pho	one	Fax	
E-mail Address					E-mail A	ddress				
Date of Birth (mm/dd/yyyy)		Social Secu	rity Numb	ber	Date of I	Birth (mm/dd/yyyy)		Social Sec	urity Num	ber
Marital Status		Number of	Donondon		Marital	Status		Numbere	fDonondo	nto.
Single Married		Number of	Dependen	its:	Sing	le 🗌 Married		Number o	I Depende	iits:
		nt Informa <u>tio</u>		_		_	Employment			_
Employed Self-Emp			Student	Not Employed	Emp				Student	Not Employed
Occupation (if retired, former	Occupation)	Type of Bu	usiness		Occupat	ion (if retired, former (Occupation)	Type of B	usiness	
Employer		Business P	hone		Employe	er		Business I	Phone	
Business Address					Business	Address				
			~	1	~				~	
City			State	Zip	City				State	Zip
	ation Inform				True of		ation Informat			
Type of ID: Driver's Lic	cense 🗋 Pa	·		cribe)		ID: Driver's Lic	ense 🗋 Pass			ribe)
Identification #		Issue Da			Identific			Issue Da		
State/Country of Issuance			ion Date		-	untry of Issuance		Expirati		
Country of Citizenship	US US	Other	er		Country	of Citizenship	🗆 US	Othe	r	
Country of Legal Residence	🗌 US	Other	er		Country	of Legal Residence	🗌 US	□ Othe	r	
Country of Tax Residence	🗆 US	Other	er		Country	of Tax Residence	🗌 US	□ Othe	r	
4. INDUSTRY AND (4 · · ·		-			
4. INDUSTRY AND C Are you, your spouse, or any c				ding parents in lows ail	linge and d	ependents				
Primary Applicant		Applicant	ioers, meiu	ang parents, m-taws, st	onings allu û	ependents.				
Yes No	Yes		Em	ployed by or associated	l with our f	irm?				
				es, what is the relation?						
🗌 Yes 🗌 No	🗌 Yes	🗌 No	Em	ployed by or associated	d with any o	other registered brol	ker/dealer or a	financial re	gulatory a	gency ?
			If y	es, please specify entity	below. If e	mployed by the entity	and, if required			
				th this Application) appr	oving estab	lishment of this accou	int.			
	—			ne of Entity:				~		
Yes No	☐ Yes	🗌 No		officer, director or 10%			iblicly owned c	ompany?		
	<u> </u>		Nar	ne of Company(ies) and	symbol(s):					
Applicant Initials										
Co Applicant Initials										
<i>Co-Applicant Initials</i>										

		For Of	fice Use Only:	IE		1	Account Numb	per:	
5. INVESTMENT PROFILI	E: This sectior	n must	be completed	l for all	account typ	es			
Annual Income				al Net Wo	orth (excluding	/		Investment Objective	
A D B E	$\Box Z$				□ D □ E	□ Z		D E	
	<u>_</u>				☐ F		□с	F	
Annual Income	-		Net Worth (cas						ax Bracket
\square \$ 50,000 or less \square \$500,0 \square \$100,000 or less \square \$1 mil			0 or less		00 or less ion or less		000 or less 000 or less	□ \$500,000 or less □ \$1 million or less	%
		\$200,00	00 or less	Over \$	1 million	\$200,0	000 or less		ecline to state
Inves If choosing more than one	tment Objective(der of priority				Ris	k Tolerance	
	Emphasis on inve			ome.					
	Emphasis on inve		0					ve my initial principal in this acco on if it means this account does no	
Growth (also called Capital Gains)	appreciate in prin income.			te	Conservative minimal risk, even if it means this account does not significant income or returns and may not keep pace inflation.				
	Emphasis on pote			form					
	appreciation; will loss of principal.	ing to ac	cept a nign riskj	jor	Moderate			ccept some risk to my initial princ latility to seek higher returns, and	
			· • •					tion of the money invested.	
XXXXXXXXXX	Seeks to take adve	harron	short term tradi	X		L	m willing to a	ccept maximum risk to my initial j	principal to
				-	Aggressive	e ag	gressively see	k maximum returns, and understa	
	Emphasis on inve preserve principa			ely to				st all, of the money invested.	
					I wish to allow	illiquid ir	vestments in t		
Investment Expe		- years	Wages/Inc	rce of Fu	nds		The investme	Investment Allocation ents in this account will be (<i>check</i>)	one):
Stocks			Pension or		ent			of my financial portfolio	she).
Bonds			Funds from	n another	account				
Options			 Savings Sale of bus 	siness or	property		More than 2/3	of my financial portfolio Investment Knowledge	
Annuities					property	🗌 Lir	nited		tensive
Partnerships			Gift/Inheri	itance			Ι	nvestment Time Horizon	
Other			Other _				o 5 years	÷	er 10 years
You may disclose my name, address which I hold securities under Rule 1					☐ Yes		In our out of	Liquidity Needs	in a)
I wish to receive All inform			information only		Image: (percent of portfolio you anticipate withdrawing □ No 0 to 5 years Over 10 years			ng)	
Please indicate dividend handling in	structions:	Hold	Send	□ F	Reinvest	5 to 10	-	Unknown/Not A	Applicable
		NUTC							
6. MUST BE SIGNED BY A I affirm I wish to open (please			CASH	ACCO		MADCI		NT AND CASH ACCOUN	·
I affirm I have supplied a vali	•	· ·							
								DE CONFIRMATIONS	
I wish to have									
By signing below, I agree to a By signing below, I affirm I									hout Vour
Borrowing Costs and Other									
Understanding and the Disclosu									
I ACKNOWLEDGE THAT									
PARAGRAPH 9 OF THE DI	<u>SCLOSURE S</u>	STATE.	MENT – FA	CTS Al	BOUT YOUI	R BORR	OWING C	<u>OSTS AND OTHER MAT</u>	<u>TERS.</u>
Applicant Signature:				Prin	t Name:			Date:	
Co-Applicant Signature:				Prin	t Name:			Date:	
			Approvals -	- FOR O	FFICE USE O	NLY			
IE Signature			I	Printed N	lame			Date	
Office Manager Signature			I	Printed N	Jame			Date	
Opening Transactions:	Buy 🗌 Sel		Deposit Fu	inds	Transfer/	Rollover	Depo	osit Securities	
Government ID Verified by:			I	Printed N	lame			Date	
Date Client Account Agreement	s Furnished:							BRR Date:	
(Form NA rev 12/2011)									

PLEASE INITIAL ALL CORRECTIONS FORMS RECEIVED WITH CORRECTION FLUID/TAPE NOT ACCEPTED

DISCLOSURE STATEMENT-FACTS ABOUT YOUR BORROWING COSTS AND OTHER MATTERS

- 1. INTEREST POLICY: Your account will be charged on any credit extended to or maintained for you by our Clearing Agent. The annual rate of interest will vary in relation to the size of your daily net debit balance and the prime rate in effect from time to time. The term "prime rate" means the current prime rate as correctly published in the Pacific Edition of the Wall Street Journal. The actual interest rate charged will not exceed the maximum rate of 4 ¼ % above the prime rate. Since the actual rates of interest charged are related to the prime rate, any changes in the prime rate may result in corresponding changes without notice in the actual rates charged. There may be an administrative fee charged to you, in the form of an interest rate increase of not more than six percent which will be determined by us and paid directly to us by the Clearing Agent. Please call your broker for the actual rates currently in effect.
- 2. METHOD OF COMPUTING INTEREST: Your account will be charged interest using a 365 day per year factor on the daily net debit balance in your combined account types. Each day your settled money balances in each account type will be combined in determining your daily net debit balance. A daily net debit balance results whenever the total of combined debit balances exceeds the total of combined free credit balances. For purposes of this calculation, free credit balances exclude credit balances in short accounts, and the sales proceeds included in settled balances are disregarded because the securities sold by you are not available for delivery and collection of the sales proceeds resulting from short sales. Sales proceeds included in settled balances from the other described sales transactions in cash accounts are disregarded because such credit items are not available to our Clearing Agent, until the related securities sold are rendered deliverable. Although the interest charge is calculated daily, it is generally posted once a month and compounded monthly. Interest charges are summarized on your monthly account statement. The summary uses a weighted average of the daily net debit balance (weighted average balance) and an imputed average interest rate for the period shown. The summary is determined by dividing the total amount of the interest charge (calculated on a daily basis using the actual daily net debit balance and the applicable interest rate) by the product of the weighted average balance multiplied by the number of calendar days the account had a daily net debit balance divided by 365 days. A copy of the daily calculation is available upon written request.
- 3. INTEREST CREDIT POLICY: Your account will be paid interest by our Clearing Agent (unless not permitted by state law) on qualified free credit balances left on deposit for investment or reinvestment purposes only. Unless you advise otherwise, our Clearing Agent will continue to rely on this representation for credit interest. There may be an administrative fee charged to you, in the form of an interest rate decrease of not more than one-half of one percent which will be determined by us and paid directly to us by the Clearing Agent. Monthly interest amounting to under \$6.00 will not be paid. The Clearing Agent's interest participation policy is non-discriminating, uniform and fair. A free credit balance represents funds payable to you upon demand (including checks deposited pending satisfactory clearance) which, although properly accounted for on the books and records, are not segregated and may be used in the conduct of the firm's business, including the financing of customers' securities purchased on margin (subject to the limitations of Section 240.15c3-3 of the Securities Exchange Act of 1934). You have a right to receive, in the course of normal business operations, upon demand, the delivery of: (a) any free credit balance to which you are entitled; (b) any fully paid security to which you are entitled; and (c) any security purchased on margin upon full payment of any indebtedness.
- 4. PREPAYMENTS: Prepaid amounts (i.e. instances where the proceeds from sales transactions are paid to you prior to each respective settlement date) are recorded as debit entries in your account on the date of each prepayment. Such prepayments are included in the money balances when calculating daily net debit balances.
- 5. LIENS & ADDITIONAL COLLATERAL: With respect to all your accounts (either individual or joint with others) carried or maintained by our Clearing Agent containing securities, or other property which has been deposited for any purpose, including safekeeping, our Clearing Agent as pledgee has a general lien on all such property for the discharge of all your obligations to the Clearing Agent, regardless of origin or the number of accounts you may have with such Clearing Agent. The Clearing Agent may require you to deposit additional collateral in accordance with the rules and regulations of various governmental and self-regulatory organizations having jurisdiction over the Clearing Agent. The Clearing Agent also may (but shall have no obligation to) require you to deposit additional collateral as the Clearing Agent, in its sole discretion, determines is needed as additional security for your obligations.
- 6. MARKING-TO-THE-MARKET: All short positions in your short account will be "marked to the market", which means that the money balance maintained in the short account will be adjusted from time to time to reflect any changes in the market value of the short securities. The opposite side of such adjustments will be reflected in your margin account balance, thus increasing or decreasing the money balance in the margin account, which is the amount used in computing your interest charge. For example, if you are short 1000 shares of XYZ against a credit balance in your short account of \$50,000, and XYZ falls to \$40 per share, the credit balance in your short account will be reduced by \$10,000 and a corresponding \$10,000 credit adjustment will be made in your margin account, thereby decreasing the amount subject to interest by \$10,000.
- 7. DIVIDEND AND INTEREST PAYMENTS: When you select the payment option, dividends and interest (including other similar distributions) generally will be distributed to you on a monthly basis.
- 8. CLEARING AGENT'S PRIVACY POLICY: The Clearing Agent collects "nonpublic personal information" from us. This information may be used by them in order to provide the services outlined in the "Letter of Understanding" you signed upon establishing your account with us. On our behalf, they may also submit and collect nonpublic and public information about you to or from consumer and industry reporting agencies. This information may relate to transactions and other activities with us or with others. The Clearing Agent may disclose any information when they believe it necessary to conduct their business, or where disclosure is required by law. The Clearing Agent will not sell any information about you. The Clearing Agent maintains physical and electronic safeguards to protect your nonpublic and public personal information in its possession.
- 9. THIS AGREEMENT CONTAINS A PREDISPUTE ARBITRATION CLAUSE. BY SIGNING AN ARBITRATION AGREEMENT THE PARTIES AGREE AS FOLLOWS:
 - (A) ALL PARTIES TO THIS AGREEMENT ARE GIVING UP THE RIGHT TO SUE EACH OTHER IN COURT, INCLUDING THE RIGHT TO A TRIAL BY JURY, EXCEPT AS PROVIDED BY THE RULES OF THE ARBITRATION FORUM IN WHICH A CLAIM IS FILED.
 - (B) ARBITRATION AWARDS ARE GENERALLY FINAL AND BINDING; A PARTY'S ABILITY TO HAVE A COURT REVERSE OR MODIFY AN ARBITRATION AWARD IS VERY LIMITED.
 - (C) THE ABILITY OF THE PARTIES TO OBTAIN DOCUMENTS, WITNESS STATEMENTS AND OTHER DISCOVERY IS GENERALLY MORE LIMITED IN ARBITRATION THAN IN COURT PROCEEDINGS.
 - (D) THE ARBITRATORS DO NOT HAVE TO EXPLAIN THE REASON(S) FOR THEIR AWARD UNLESS, IN AN ELIGIBLE CASE, A JOINT REQUEST FOR AN EXPLAINED DECISION HAS BEEN SUBMITTED BY ALL PARTIES TO THE PANEL AT LEAST 20 DAYS PRIOR TO THE FIRST SCHEDULED HEARING DATE.
 - (E) THE PANEL OF ARBITRATORS WILL TYPICALLY INCLUDE A MINORITY OF ARBITRATORS WHO WERE OR ARE AFFILIATED WITH THE SECURITIES INDUSTRY.
 - (F) THE RULES OF SOME ARBITRATION FORUMS MAY IMPOSE TIME LIMITS FOR BRINGING A CLAIM IN ARBITRATION. IN SOME CASES, A CLAIM THAT IS INELIGIBLE FOR ARBITRATION MAY BE BROUGHT IN COURT.
 - (G) THE RULES OF THE ARBITRATION FORUM IN WHICH THE CLAIM IS FILED, AND ANY AMENDMENTS THERETO, SHALL BE INCORPORATED INTO THIS AGREEMENT.

BY SIGNING THE "ACCOUNT AGREEMENT, TAXPAYER CERTIFICATION AND BENEFICIAL OWNERSHIP ELECTION" FORM (THE "AGREEMENT") YOU AGREE, AND BY ESTABLISHING AN ACCOUNT FOR YOU, WE AND OUR CLEARING FIRM AGREE THAT ALL CONTROVERSIES WHICH MAY ARISE BETWEEN YOU AND OUR FIRM AND/OR OUR CLEARING AGENT (OR ANY OF OUR/THEIR OFFICERS, EMPLOYEES OR AGENTS OR ASSIGNEES) CONCERNING ANY TRANSACTION OR THE CONSTRUCTION, PERFORMANCE OR BREACH OF THIS OR ANY OTHER AGREEMENT BETWEEN YOU AND OUR FIRM AND/OR OUR CLEARING AGENT, SHALL BE DETERMINED BY ARBITRATION IN ACCORDANCE WITH THE RULES, THEN IN EFFECT, OF THE FINANCIAL INDUSTRY REGULATORY AUTHORITY, THE NEW YORK STOCK EXCHANGE OR ANY OTHER EXCHANGE OR FORUM OF WHICH OUR FIRM AND/OR OUR CLEARING AGENT IS A MEMBER, AS YOU MAY ELECT. IF YOU DO NOT MAKE SUCH ELECTION BY REGISTERED MAIL SENT TO OUR FIRM AT ITS MAIN OFFICE WITHIN THEN (10) DAYS AFTER THE RECEIPT OF NOTIFICATION FROM OUR FIRM AND/OR OUR CLEARING AGENT REQUESTING SUCH AN ELECTION, THEN YOU AUTHORIZE US TO MAKE SUCH ELECTION ON YOUR BEHALF.

FURTHERMORE, YOU AGREE AND ACKNOWLEDGE, AND OUR FIRM AND OUR CLEARING AGENT AGREE AND ACKNOWLEDGE THAT NO PERSON SHALL BRING A PUTATIVE OR CERTIFIED CLASS ACTION TO ARBITRATION, NOR SEEK TO ENFORCE ANY PREDISPUTE ARBITRATION AGREEMENT AGAINST ANY PERSON WHO HAS INITIATED IN COURT A PUTATIVE CLASS ACTION; OR WHO IS A MEMBER OF A PUTATIVE CLASS ACTION 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 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. 1111C-600 Disclosure Statement

E Codo	Account Number

To: LII J VURGGF 'HKP CP EKCN'UGT XKEGU'I TQWR LLC

(Name of Securities Firm)

Relative to maintaining a margin account with you through the facilities of your correspondent clearing agent (the "Clearing Agent") whereupon the Clearing Agent may extend credit to the undersigned, the undersigned understands and concurs with the provisions of this Agreement.

- 1. CORRESPONDENT ARRANGEMENT: Under a correspondent arrangement, the undersigned's margin account is to be carried, cleared and maintained by your Clearing Agent pursuant to a written agreement between you and the Clearing Agent, which provides, in part, that the undersigned will continue to be your customer and not the customer of the Clearing Agent. Credit may be extended by the Clearing Agent to the undersigned in accordance with this Agreement.
- 2. DISCLOSURE STATEMENT: The undersigned acknowledges receipt of the current Disclosure Statement concurrently furnished with this Agreement. This Agreement is expressly made in reference to the disclosures set forth in such statement.
- 3. APPLICABLE RULES AND REGULATIONS: All transactions under this Agreement shall be subject to the constitution, rules, regulations, customs, usages, rulings and interpretations of the exchange or market, and its clearing and depository facilities, where executed, to all governmental acts and statutes and applicable rules and regulations made thereunder, and to all applicable judicial and administrative decisions or interpretations. Whenever any statute shall be enacted, or any rule or regulation shall be prescribed or promulgated by any exchange or association of which you or your Clearing Agent is a member, the Securities and Exchange Commission, the Commodities Futures Trading Commission or the Board of Governors of the Federal Reserve System, or whenever any final decision or interpretation shall be issued by any court or administrative body of competent jurisdiction which shall affect in a manner or be inconsistent with any of the provisions of this Agreement, those provisions shall be deemed modified or superseded, as the case may be, by such act, statute, rule, regulation, decision or interpretation. All other provisions of this Agreement and the provisions as so modified or as so superseded shall in all respects continue and be in full force and effect.
- 4. DEFINITION: For purposes of this Agreement "securities or other property," as used herein shall include, but not be limited to monies, securities, financial instruments and commodities of every kind and nature, and all contracts and options relating thereto, whether for present or future delivery. The "undersigned" shall mean the customer or joint customer, as applicable.
- 5. LIEN: All securities or other property which you, your Clearing Agent or your other agents or agents of your Clearing Agent may at any time be carrying or maintaining for the undersigned or which may at any time be in you or your Clearing Agent's possession or control for any purpose, including safekeeping, shall be subject to a first and prior security interest and lien for the discharge of the undersigned's obligations to Clearing Agent (and, as determined by Clearing Agent, agents of Clearing Agent and ourselves) and held as security for the payment of any liability of the undersigned to your Clearing Agent irrespective of whether advances have been made in connection with such securities or other property, and irrespective of the number of accounts the undersigned may have with you or your Clearing Agent.
- 6. PLEDGES OF SECURITIES OR OTHER PROPERTY: All securities or other property, presently or in the future, carried or maintained by the Clearing Agent for the undersigned (either individually, or jointly with others), may be held in the Clearing Agent's name or the name of any nominee and may from time to time and without notice to the undersigned, be carried in general loans and may be pledged, re-pledged, hypothecated, or re-hypothecated, or loaned either to the Clearing Agent or to others, separately or in common with other securities or other property, for any amount due in the accounts of the undersigned or for any greater amount, and without retaining possession or control for delivery a like amount of similar securities or other property. After receipt of demand for delivery and the undersigned becoming entitled to delivery, the Clearing Agent shall have a reasonable time to ship securities, or other property from Los Angeles, California, or from any other place where such may be located, to the place where such are to be delivered to the undersigned.
- 7. MAINTENANCE MARGIN REQUIREMENTS: The undersigned shall at all times maintain acceptable collateral in the form of securities or other property in sufficient amounts as may be required by the Clearing Agent from time to time for the Clearing Agent's protection or to meet the requirements of various regulatory bodies ("maintenance margin"). The amount of maintenance margin required by the Clearing Agent may vary depending on the type of collateral (stocks, corporate bonds, municipal and government bonds, etc.) in the account and/or on the quantity of such collateral in terms of high concentration factors and/or illiquid trading markets for such collateral. The undersigned understands that although the Clearing Agent does not limit the factors which may require additional collateral, factors such as market fluctuations, unusual or volatile market conditions, high concentrations, precipitous market declines, illiquid trading markets, quality of collateral or the overall credit standing of the account shall be considered. Notwithstanding the foregoing, additional collateral may be required in the Clearing Agent's discretion. The undersigned further acknowledges and agrees that in the event a maintenance margin deficiency exists the Clearing Agent may liquidate (but the Clearing Agent shall not be required to do so) all or any part of the collateral in the account. The Clearing Agent may liquidate the collateral as the Clearing Agent, in its discretion, shall deem appropriate in view of the prevailing market conditions at such time. Such action by the Clearing Agent to liquidate all or any part of the collateral, whether in a single transaction or in a series of transactions of the same or of different collateral, could result in a deficit for which the undersigned shall remain liable to the Clearing Agent.

THE UNDERSIGNED CLEARLY UNDERSTANDS THAT, NOTWITHSTANDING ANY GENERAL POLICY TO GIVE NOTICE OF A MAINTENANCE MARGIN DEFICIENCY, THERE IS NO OBLIGATION TO REQUEST ADDITIONAL MARGIN IN THE EVENT THE UNDERSIGNED'S ACCOUNT FALLS BELOW THE MINIMUM MARGIN REQUIREMENTS. MORE IMPORTANTLY, THERE MAY WELL BE CIRCUMSTANCES WHERE THE CLEARING AGENT MAY LIQUIDATE SECURITIES AND OTHER PROPERTY IN THE ACCOUNT OF THE UNDERSIGNED WITHOUT NOTICE TO THE UNDERSIGNED IN ORDER TO SATISFY THE CLEARING AGENT'S MAINTENANCE REQUIREMENTS.

8. LIQUIDATION: NOTWITHSTANDING OTHER PROVISIONS, THE CLEARING AGENT IS AUTHORIZED AT ITS DISCRETION TO CLOSE THE ACCOUNT IN WHOLE OR IN PART WHENEVER THE CLEARING AGENT CONSIDERS IT NECESSARY FOR ITS PROTECTION. IN ADDITION, THE OCCURRENCE OF EITHER OF THE FOLLOWING EVENTS SHALL BE CONSIDERED A DEFAULT BY THE UNDERSIGNED ENTITLING THE CLEARING AGENT, IN ITS DISCRETION, TO CLOSE THE ACCOUNT: (A) ONE OR MORE OF THE UNDERSIGNED BE JUDICIALLY DECLARED INCOMPETENT OR DIES, OR A PETITION IN BANKRUPTCY OR FOR THE APPOINTMENT OF A RECEIVER BY OR AGAINST ONE OR MORE OF THE UNDERSIGNED IS FILED, OR AN ATTACHMENT IS LEVIED AGAINST ONE OR MORE OF THE UNDERSIGNED'S ACCOUNTS; OR (B) THE COLLATERAL DEPOSITED TO PROTECT THE UNDERSIGNED'S ACCOUNT IS DETERMINED BY THE CLEARING AGENT IN ITS DISCRETION, AND REGARDLESS OF MARKET QUOTATIONS, TO BE INADEQUATE TO PROPERLY SECURE THE ACCOUNT. IN CONNECTION THEREWITH, THE CLEARING AGENT MAY SELL ANY OR ALL OF THE SECURITIES OR OTHER PROPERTY WHICH MAY BE IN ITS POSSESSION OR CONTROL, OR WHICH MAY BE CARRIED OR MAINTAINED BY THE CLEARING AGENT OR ITS AGENT OR ITS AGENT OR ITS AGENT FOR THE UNDERSIGNED, OR THE CLEARING AGENT

MAY "BUY IN" ANY SECURITIES OR OTHER PROPERTY OF WHICH THE ACCOUNT OR ACCOUNTS OF THE UNDERSIGNED MAY BE SHORT, OR CANCEL ANY OUTSTANDING ORDERS SO AS TO TERMINATE ANY COMMITMENT MADE IN BEHALF OF THE UNDERSIGNED. SUCH SALE, PURCHASE OR CANCELLATION MAY BE MADE ACCORDING TO THE CLEARING AGENT'S JUDGEMENT AND BE MADE, AT ITS DISCRETION, ON ANY EXCHANGE OR OTHER MARKET WHERE SUCH BUSINESS IS CUSTOMARILY TRANSACTED, OR AT PUBLIC AUCTION OR AT PRIVATE SALE, WITHOUT ADVERTISING THE SAME AND WITHOUT NOTICE TO THE UNDERSIGNED OR TO THE PERSONAL REPRESENTATIVES OF THE UNDERSIGNED, AND WITHOUT PRIOR TENDER, DEMAND OR CALL OF ANY KIND UPON THE UNDERSIGNED OR UPON THE PERSONAL REPRESENTATIVES OF THE UNDERSIGNED. THE CLEARING AGENT MAY (BUT SHALL NOT BE OBLIGATED TO) PURCHASE THE WHOLE OR ANY PART THEREOF FREE FROM ANY RIGHT OF REDEMPTION OR THE CLEARING AGENT MAY TRANSFER THE WHOLE OR ANY PART THEREOF OR THE RIGHTS THERETO TO THE UNDERSIGNED; AND, IN ANY SUCH EVENT, THE UNDERSIGNED SHALL REMAIN LIABLE FOR ANY DEFICIENCY. IT IS UNDERSTOOD THAT A PRIOR TENDER, DEMAND, CALL OF ANY KIND, OR PRIOR NOTICE FROM THE CLEARING AGENT OF THE TIME AND PLACE OF SUCH SALE OR PURCHASE SHALL NOT BE CONSIDERED A WAIVER OF THE CLEARING AGENT'S RIGHT TO SELL OR BUY ANY SECURITIES OR OTHER PROPERTY IN ITS POSSESSION OR CONTROL OR OWED THE CLEARING AGENT BY THE UNDERSIGNED, AT ANY TIME WITHOUT PRIOR TENDER, DEMAND, CALL OR NOTICE.

- 9. PAYMENT OF INDEBTEDNESS UPON DEMAND: The undersigned undertakes upon demand, to discharge the undersigned's obligations to the Clearing Agent, or, in the event of a closing of any account of the undersigned in whole or in part by the Clearing Agent or the undersigned, to pay the deficiency, if any, and the undersigned agrees to reimburse the Clearing Agent for any costs or expenses incurred in collecting such amounts, including reasonable attorney's fees.
- 10. EXECUTION OF ORDERS: All orders given by the undersigned for the purchase or sale of securities or other property, which may be traded on more than one exchange or market, may be executed on any exchange or market.
- 11. RIGHT TO TRANSFER MONIES AND SECURITIES: All transactions for or in connection with the undersigned's account shall be deemed to be included in a single account notwithstanding the fact that such transactions may be segregated on the Clearing Agent's records into separate account, either severally or jointly with others. At any time and from time to time, the Clearing Agent may without notice to the undersigned apply and transfer any or all monies, securities, and/or other property of the undersigned interchangeably between any accounts of the undersigned other than from or to a related commodity account.
- 12. INTEREST CHARGES: Debit balances in the account of the undersigned shall be charged with interest in accordance with the Clearing Agent's usual custom, and as permitted by the laws of the State of California, and with such other charges as may be made to cover the Clearing Agent's facilities and extra services. It is understood and agreed that the interest charge made to the undersigned's account at the close of one charge period will be compounded, that is, added to the opening balance for the next charge period unless paid, thereby becoming part of the principal amount and bearing like interest. There may be an administrative fee charged to the undersigned's account in the form of an interest rate increase of not more than six percent which will be determined by you and paid directly to you by the Clearing Agent. It is further understood and agreed that the procedures employed by the Clearing Agent from time to time, and without notice, based on money market conditions and other factors, and that the procedures employed by the Clearing Agent in charging and computing interest are as set forth in the current Disclosure Statement which has been delivered to the undersigned, or in any subsequent Disclosure Statement which the Clearing Agent may send the undersigned.

Short selling may involve the Clearing Agent borrowing the securities at a negative interest rate and certain minimums on low priced securities. The negative interest rate can vary daily and you agree to these charges without notification.

- 13. REPRESENTATION AS TO SECURITIES TRANSACTIONS: When entering a sell order, the undersigned shall designate it as either a "long sale" or "short sale" and hereby authorizes that all such sell orders be properly identified on the records as either long sales or short sales. Any sell order which the undersigned shall designate as being a long sale shall be for securities then owned by the undersigned, and if such securities are not presently held by the Clearing Agent or its agents in the account of the undersigned, the placing of such sell order shall constitute a representation that the undersigned shall deliver such securities forthwith. Further, in cases involving the sale of securities or other property by the undersigned, which results in the Clearing Agent's inability to deliver such to the purchaser or purchaser's agent due to failure by the undersigned to effect the delivery of such sold securities or other property in good deliverable form subject to no transfer restrictions, the undersigned agrees to be fully responsible for all losses and added expenses which the Clearing Agent may sustain by reason of its inability to borrow or as a result of buying in such securities or other property. All securities transactions executed in behalf of the undersigned shall be on an agency basis, unless otherwise disclosed by formal trade notification or other writing that a specific transaction shall have been on a dealer basis. Transaction reports concerning the execution of orders and account statements of the undersigned shall be conclusive if not objected to in writing promptly.
- 14. PRESUMPTION OF RECEIPT OF COMMUNICATIONS: Communications may be sent to the undersigned at the address indicated in the Clearing Agent's records from time to time, and all communications so sent, whether by mail, telegram, messenger or otherwise shall be deemed given to the undersigned personally, whether actually received or not.
- 15. LAWS OF THE STATE OF CALIFORNIA: The provisions of this Agreement shall in all respects be construed according to, and the rights and liabilities of the parties hereto shall in all respects be governed by, the laws of the State of California.
- 16. SEPARABILITY: If any provision of this Agreement is determined to be unenforceable, such determination shall not affect the validity of the remaining provisions of this Agreement
- 17. OBLIGATIONS CONTINUOUS: The provisions of this Agreement shall be continuous and cover individually and collectively all accounts maintained by the Clearing Agent, which the undersigned may open or reopen and shall inure to the benefit of the Clearing Agent, its successors and assignees and shall be binding upon the undersigned and/or the estate, heirs, executors, personal representatives, administrators and assignees of the undersigned.
- 18. REPRESENTATIONS AS TO CAPACITY TO ENTER INTO AGREEMENT: The undersigned, if an individual, represents that the undersigned is of legal age, and, unless otherwise specifically disclosed in writing herewith, that the undersigned is not an employee of any exchange, or of any corporation of which any exchange owns a majority of the capital stock, or of a member of any exchange or of a member firm or member corporation registered on any exchange, or of a bank, trust company, insurance company or of any corporation, firm or individual engaged in the business of dealing, either as broker or as principal, in securities, bills of exchange, acceptances or other forms of commercial paper. If the account holder is a corporation, partnership, trust or other entity, the account holder represents that its governing instruments permit this Agreement, that this Agreement has been duly authorized by all applicable persons and that the account holder signatory is authorized to bjnd the account holder. The undersigned further represents that no one except the undersigned has an interest in the account or accounts of the undersigned maintained by the Clearing Agent, and that the undersigned shall cause notification to the Clearing Agent in writing of any change.

- 19. JOINT AND SEVERAL LIABILITY: If the undersigned consists of more than one individual, the obligations under this Agreement shall be joint and several.
- 20. DISCLOSURE OF FINANCIAL INFORMATION: The undersigned understands in connection with this Agreement an investigation may be made whereby information is obtained relative to the undersigned's character, general reputation, and credit worthiness, and that the undersigned has the right to make a written request within a reasonable period of time for a complete and accurate disclosure of additional information concerning the nature and scope of this investigation.
- 21. EXTRAORDINARY EVENTS: The Clearing Agent shall not be liable for losses caused directly or indirectly by government restrictions, exchange or market rulings, suspension of trading, war, strikes or other conditions beyond the Clearing Agent's control.
- 22. CONTROL AND RESTRICTED SECURITIES: In connection with any securities subject to resale limitations under Rule 144 or Rule 145 of the Securities Act of 1933, as amended (the "Act"), held by the Clearing Agent or its agents on behalf of the undersigned, the undersigned grants unto the Clearing Agent irrevocable power to execute stock powers, and to execute and file Form 144 and other applicable documents as required by the Act on behalf of the undersigned.
- 23. MODIFICATIONS AND AMENDMENTS TO AGREEMENT: Except as herein otherwise expressly provided, no provision of this Agreement may be waived, altered, modified or amended unless such waiver, alteration, modification or amendment is in writing and signed by a duly authorized officer as designated by the Clearing Agent.
- 24. HEADINGS: The heading of each provision hereof is for descriptive purposes only and shall not be deemed to modify or qualify any of the rights or obligations set forth in each provision.
- 25. **ARBITRATION:** THIS AGREEMENT CONTAINS A PREDISPUTE ARBITRATION CLAUSE. BY SIGNING AN ARBITRATION AGREEMENT THE PARTIES AGREE AS FOLLOWS:
 - (A) ALL PARTIES TO THIS AGREEMENT ARE GIVING UP THE RIGHT TO SUE EACH OTHER IN COURT, INCLUDING THE RIGHT TO A TRIAL BY JURY, EXCEPT AS PROVIDED BY THE RULES OF THE ARBITRATION FORUM IN WHICH A CLAIM IS FILED.
 - (B) ARBITRATION AWARDS ARE GENERALLY FINAL AND BINDING; A PARTY'S ABILITY TO HAVE A COURT REVERSE OR MODIFY AN ARBITRATION AWARD IS VERY LIMITED.
 - (C) THE ABILITY OF THE PARTIES TO OBTAIN DOCUMENTS, WITNESS STATEMENTS AND OTHER DISCOVERY IS GENERALLY MORE LIMITED IN ARBITRATION THAN IN COURT PROCEEDINGS.
 - (D) THE ARBITRATORS DO NOT HAVE TO EXPLAIN THE REASON(S) FOR THEIR AWARD UNLESS, IN AN ELIGIBLE CASE, A JOINT REQUEST FOR AN EXPLAINED DECISION HAS BEEN SUBMITTED BY ALL PARTIES TO THE PANEL AT LEAST 20 DAYS PRIOR TO THE FIRST SCHEDULED HEARING DATE
 - (E) THE PANEL OF ARBITRATORS WILL TYPICALLY INCLUDE A MINORITY OF ARBITRATORS WHO WERE OR ARE AFFILIATED WITH THE SECURITIES INDUSTRY.
 - (F) THE RULES OF SOME ARBITRATION FORUMS MAY IMPOSE TIME LIMITS FOR BRINGING A CLAIM IN ARBITRATION. IN SOME CASES, A CLAIM THAT IS INELIGIBLE FOR ARBITRATION MAY BE BROUGHT IN COURT.
 - (G) THE RULES OF THE ARBITRATION FORUM IN WHICH THE CLAIM IS FILED, AND ANY AMENDMENTS THERETO, SHALL BE INCORPORATED INTO THIS AGREEMENT.

BY SIGNING THE "ACCOUNT AGREEMENT, TAXPAYER CERTIFICATION AND BENEFICIAL OWNERSHIP ELECTION" FORM (THE "AGREEMENT") YOU AGREE, AND BY ESTABLISHING AN ACCOUNT FOR YOU, WE AND OUR CLEARING FIRM AGREE THAT ALL CONTROVERSIES WHICH MAY ARISE BETWEEN YOU AND OUR FIRM AND/OR OUR CLEARING AGENT (OR ANY OF OUR/THEIR OFFICERS, EMPLOYEES OR AGENTS OR ASSIGNEES) CONCERNING ANY TRANSACTION OR THE CONSTRUCTION, PERFORMANCE OR BREACH OF THIS OR ANY OTHER AGREEMENT BETWEEN YOU AND OUR FIRM AND/OR OUR CLEARING AGENT, SHALL BE DETERMINED BY ARBITRATION IN ACCORDANCE WITH THE RULES, THEN IN EFFECT, OF THE FINANCIAL INDUSTRY REGULATORY AUTHORITY, THE NEW YORK STOCK EXCHANGE OR ANY OTHER EXCHANGE OR FORUM OF WHICH OUR FIRM AND/OR OUR CLEARING AGENT IS A MEMBER, AS YOU MAY ELECT. IF YOU DO NOT MAKE SUCH ELECTION BY REGISTERED MAIL SENT TO OUR FIRM AT ITS MAIN OFFICE WITHIN TEN (10) DAYS AFTER THE RECEIPT OF NOTIFICATION FROM OUR FIRM AND/OR OUR CLEARING AGENT REQUESTING SUCH AN ELECTION, THEN YOU AUTHORIZE US TO MAKE SUCH ELECTION ON YOUR BEHALF.

FURTHERMORE, YOU AGREE AND ACKNOWLEDGE, AND OUR FIRM AND OUR CLEARING AGENT AGREE AND ACKNOWLEDGE THAT NO PERSON SHALL BRING A PUTATIVE OR CERTIFIED CLASS ACTION TO ARBITRATION, NOR SEEK TO ENFORCE ANY PREDISPUTE ARBITRATION AGREEMENT AGAINST ANY PERSON WHO HAS INITIATED IN COURT A PUTATIVE CLASS ACTION; OR WHO IS A MEMBER OF A PUTATIVE CLASS ACTION 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 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.

- 26. LOAN CONSENT: THE CLEARING AGENT IS HEREBY AUTHORIZED TO LEND, EITHER SEPARATELY OR WITH OTHER SECURITIES, TO EITHER THE CLEARING AGENT AS BROKERS OR TO OTHERS, SECURITIES HELD BY THE CLEARING AGENT ON MARGIN ON BEHALF OF THE UNDERSIGNED. IN CERTAIN CIRCUMSTANCES, SUCH LOANS MAY LIMIT, IN WHOLE OR IN PART, YOUR ABILITY TO EXERCISE VOTING AND OTHER RIGHTS OF OWNERSHIP WITH RESPECT TO THE LOANED OR PLEDGED SECURITIES. DIVIDENDS PAID ON THESE LOANED OR PLEDGED SECURITIES MAY BE PAID IN THE FORM OF "IN LIEU OF DIVIDENDS' THAT MAY NOT QUALIFY AS DIVIDEND INCOME FOR TAX PURPOSES.
 - λ THE UNDERSIGNED ACKNOWLEDGES THAT THIS AGREEMENT ALSO CONTAINS A PREDISPUTE ARBITRATION PROVISION UNDER PARAGRAPH 25 ABOVE, AND A LOAN CONSENT AGREEMENT PROVISION UNDER PARAGRAPH 26 ABOVE.
 - λ THE UNDERSIGNED FURTHER ACKNOWLEDGES THAT A COPY OF THIS AGREEMENT AND THE "DISCLOSURE STATEMENT FACTS ABOUT YOUR BORROWING COSTS AND OTHER MATTERS" HAS BEEN FURNISHED TO THE UNDERSIGNED.
 - λ I HAVE RECEIVED A SEPARATE MARGIN RISKS DISCLOSURE STATEMENT CONCURRENT WITH THIS AGREEMENT.

FOR ENTITY ACCOUNTS			
	Name of Entity		
FOR ALL ACCOUNTS Customer			
	Print Name and Title	Signature	Date
Joint Customer			
	Print Name and Title	Signature	Date
Correspondent Broker Signature Guarantee		-	
	Print Name	Signature	Date
	(ount both Customer and Joint Customer must sign) Int, please sign in capacity – Trustee, President, etc.)	
00400 M	· · ·		

CORPORATE RESOLUTION

BE IT RESOLVED, that the President	(Name)
Vice President	. Treasurer
(Name)	, Treasurer(Name)
or any one of them acting individually, be ar	nd they are hereby authorized to sell, assign and endorse for
transfer, certificates representing stocks, both	nds, or other securities now registered or hereafter registered
in the name of this corporation.	
l,	, Secretary of
(Na	me of Corporation)
incorporated under the laws of the State	of, hereby certify that the
	y adopted by the Board of Directors of said corporation at a
meeting duly held the day of	, 20, at which a quorum was present and
voting, and that the same has not been rep	ealed or amended, and remains in full force effect and does
not conflict with the by-laws of said corporation	on.
	Date:
	Secretary
	(Must not be signed by Officer named in the Resolution)
(CORPORATE SEAL)	
(If no seal, certify that there is no seal and no	otarize)
Subscribed and Sworn to Before Me	
This day of 20	
Notary Public (Affix Seal)	



Customer Identification Form

FINANCIAL SERVICES GROUP

This form is to be completed by any and all managers, members, partners, grantors/trustor, trustees, officers or directors. All boxes must be completed and returned along with your account paperwork. Please use more than one form if needed.

Account Number:		Account Title			
Name Social Security Number	Date of Birth		Residential Address (No PO Boxes)		
Phone Number	Role/Title				
Email Address]	Date	
Name Social Security Number Phone Number	Date of Birth Role/Title		Residential Address (No PO Boxes)		
Email Address]	Date	
Name Social Security Number	Date of Birth		Residential Address (No PO Boxes)		
Phone Number	Role/Title				
Email Address]	Date	
	For	Lightspeed	Office Use Only		
Manager					
Manager Approval				Date	

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OPTION ACCOUNT APPLICATION

To: Lightspeed Financial Services Group LLC

For Office Use Only: IE	Account Number:	New Account	pdate to Existing Account
1. ACCOUNT TYPE: Please check Individual Custodian for Minor Estate/Conservatorship Personal Trust **For AZ, CA, ID, LA, NV, NM, TX, WA AND WI	Joint (rights of survivorship) Corporation LLC/LLP Retirement Trust	Partnership Sole Pro Voluntary Association IRA (mu	ommunity Property*) prietorship 1st accompany form I) 1 (contact Retirement Services)
2. ACCOUNT INFORMATION			
ACCOUNT TITLE		ACCOUNT ADDRESS	
3. INVESTMENT PROFILE This set Annual Income	ction must be completed unless ac Liquid Net Worth (cash, securities		Tax Bracket
□ \$ 24,999 or less □ \$75,000-199,999	□ \$ 24,999 or less □ \$100,000-		
□ \$25,000-39,999 □ \$200,000-499,999 □ \$40,000-74,999 □ \$500,000 or more	\$25,000-39,999 \$250,000- \$40,000-99,999 \$1 million		9 \square Decline to state
Investment Obj			
If choosing more than one objective, p	lease rank in order of priority.	Risk Tolerance	
(also called Emphasis	on investments that generate income. on investments more likely to	Conservative I want to preserve my initial prin minimal risk, even if it means this significant income or returns and inflation.	s account does not generate
income. Emphasis	in principal rather than generate	I am willing to accept some risk i tolerate some volatility to seek hi understand I could lose a portion	gher returns, and
loss of prin	on; willing to accept a high risk for acipal. on investments that are most likely to	I am willing to accept maximum Aggressive to aggressively seek maximum re	risk to my initial principal turns, and understand
4. OPTIONS TRADING QUESTION	rincipal. Low risk.	I could lose all, or most all, of th	e money invested.
		are seeking approval. * Margin account required	l
 COVERED WRITING PURCHASING CALLS AND PU * SPREADS (PUTS AND CALLS) 	YES NO	 4. * UNCOVERED PUT WRITING 5. * UNCOVERED CALL WRITING 6. * UNCOVERED INDEX 	☐ YES ☐ NO ☐ YES ☐ NO ☐ YES ☐ NO
OPTIONS INVESTMEN		OPTIONS INVESTMENT KNO	
< l year Covered Writing Purchasing Calls and Puts Spreads (Puts and Calls) Uncovered Put Writing Uncovered Call Writing Uncovered Index	1-5 years 5 + years	Limited M Covered Writing Purchasing Calls and Puts Spreads (Puts and Calls) Uncovered Put Writing Uncovered Call Writing Uncovered Index	oderate Extensive Image: Image of the system Image of the system Image of the system
5. MUST BE SIGNED BY ALL PAR	RTIES		
Corporation and am aware of and accept the natu application are suitable investments for my account	eived, read and understand the <i>Characte</i> tre and extent of the obligations and risk unt. I also acknowledge that I have receiv rstand and agree to all the terms contained	ristics and Risks of Standardized Options published by the factors of options trading. I believe the options transaction yed the New Account Agreement, Option Account Agreen ed in the Option Account Agreement. If I have selected M	ns indicated in this nent, Letter of
Applicant Signature:	Prin	nt Name: Date:	
Co-Applicant Signature:	Priı	nt Name: Date:	
Î.	Approvals – FOR OI	FICE USE ONLY	
RR Signature	Printed Name	Date	Approval Level
BOM Signature	Printed Name	Date	Approval Level
Principal Signature	Printed Name	Date	
ROP Signature	Printed Name	Date	
Date Client Account Agreements Furnished:	and a second		x

OPTION ACCOUNT AGREEMENT

In addition to the terms and conditions of the <u>Account Agreement</u>, the following terms apply to all Option accounts.

For any transaction effected by us on your behalf for the purchase and/or sale of any option contracts traded on any registered options exchange, or any other national securities exchange, you agree as follows:

1. All transactions are governed by the constitution, rules, interpretations and policies, customs, and regulations of the exchange or market where executed and of the Options Clearing Corporation.

2. You acknowledge that you have received, read, and understand the "Characteristics and Risks of Standardized Options" ("the Disclosure"). You acknowledge that you received this Disclosure prior to the first option transaction effected in your account, and you specifically affirm the following, as set forth in the Disclosure:

a) That both the purchase and the writing of option contracts involve a high degree of risk, are not suitable for many investors and, accordingly, should be entered into only by investors who understand the nature and extent of their rights and obligations and are fully aware of the inherent risk involved;

b) That you should not purchase an option unless you are able to sustain a total loss of the premium and transaction costs, that you should not write a call option unless you either own the underlying security (or a security convertible, exchangeable, or exercisable into the underlying security) or are able to sustain substantial financial losses, and that you should not write a put option unless you are able to sustain substantial financial losses;

c) That the price of an option contract is affected by various factors such as the relationship between the exercise price and the market price of the underlying security, the expiration of the option, and the price fluctuations or other characteristics of the underlying stock.

d) That the Exchanges may restrict transactions in particular options or the exercise of option contracts in their discretion.

3. Options trading may be highly speculative. You are willing to assume all the financial risks and hazards of options trading, and you have determined that in view of your financial situation and investment objectives, options trading is not unsuitable for you.

4. You, acting alone or in concert with others, will not violate the position or exercise limits set forth by the Options Clearing Corporation.

5. You acknowledge that on certain trading days, trading may cease or be restricted in one or more classes of options and that this may result in financial disadvantage or loss to you. You agree to hold harmless WS and the exchange involved, and their respective officers, directors, and agents, for this or any other loss resulting from any acts made in accordance with the constitution, rules, interpretations and policies, customs, or regulations of the Exchanges or the Options Clearing Corporation.

6. You understand and agree to abide by our requirements and time limitations for accepting an exercise notice from you.

7. You have been advised of and agree to abide by our policies, exchange, and federal regulations regarding margining of options and related transactions.

8. You agree to advise us of any material changes in your needs, experience, financial situation, or investment objectives.

9. You agree that in the event less than three days remain until expiration, and when we have, after repeated attempts, been unable to contact you regarding any expiring option positions that remain in your account, we may exercise the limited discretion granted here to liquidate those positions as we may see fit. This limited discretionary authority shall not require us to take any action, whatsoever. In the event that we should liquidate any option positions, your account will be credited in a fair and equitable manner.

10. You agree that in the event you notify us that you do not wish to exercise a long option, we may buy such option as principal for our own account.

11. Any other agreement by you with us shall also apply to such option transactions, except to the extent such other agreements conflict with this Agreement. In the event of a conflict, this Agreement shall control; and where there is no conflict each provision of each agreement shall apply.

12. Exercise assignment notices for option contracts are allocated among client short positions pursuant to an automated procedure which randomly selects from among all clients' short option positions, including positions established on the day of assignment, those contracts which are subject to exercise. All "American-style" short option positions are liable for assignment at any time. All "European-style" short option positions are liable for assignment within the specified period for assignment contained within the option contract. 13. By completing the "Options" section and signing the **Account Agreement, and Letter of Understanding** ("Letter A", you acknowledge you have received the Disclosure document and you are aware of and accept the nature and extent of the obligations and risk factors of options trading, and you believe the options transactions you have indicated in the Client Account Information Form to be suitable investments for your account. You acknowledge that you have read, understand, and agree to the terms and conditions of this agreement. Additionally, if you have indicated that you wish to invest in uncovered options, you acknowledge that you have read the "Special Statement for Uncovered Option Writers" below.

You further agree that you will advise us promptly in writing of any material changes in the information supplied on the WS Client Account Information Form. You acknowledge and understand that an Options Clearing Corporation prospectus is available from WS upon request.

If you have indicated "Uncovered Calls or Puts" as an option investment choice, please read the following statement carefully.

Special Statement for Uncovered Writers: There are special risks associated with uncovered option writing, which expose the investor to potential significant loss. Therefore, this type of strategy may not be suitable for all clients approved for options transactions.

The potential loss of uncovered call writing is unlimited. The writer of any uncovered call is in an extremely risky position, and may incur large losses if the value of the underlying instrument increases above the exercise price. As with writing uncovered calls, the risk of writing uncovered put options is substantial. The writer of an uncovered put option bears a risk of loss if the value of the underlying instrument declines below the exercise price. Such loss would be substantial if there is a significant decline in the value of the underlying instrument.

Uncovered option writing is thus suitable only for the knowledgeable investor who understands the risks, has the financial capacity and willingness to incur potentially substantial losses, and has sufficient liquid assets to met applicable margin requirements. In this regard, if the value of the underlying instrument moves against an uncovered writer's options positions, the investor's broker may request significant additional margin payments. If an investor does not make such margin payments, the broker may liquidate stock or options positions in the investor's account, with little or no prior notice in accordance with the investor's margin agreement.

For combination writing, where the investor writes both a put and a call on the same underlying instrument, the potential risk is unlimited.

If a secondary market in options were to become unavailable, investors could not engage in closing transactions, and an options writer would remain obligated until expiration or assignment.

The writer of an American-style option is subject to being assigned an exercise at any time after he has written the option until the option expires. By contrast, the writer of a European-style option is subject to exercise assignment only during the exercise period.

NOTE: It is expected that you will read the booklet entitled "Characteristics and Risks of Standardized Options" (the Disclosure) available from your broker. In particular, your attention is directed to the chapter entitled "Risks of Buying and Writing Options". This statement is not intended to enumerate all of the risks entailed in writing uncovered options.

Lightspeed Financial Services Group

Name of Securities Firm

In order to better service your financial needs, our firm has engaged Wedbush Securities Inc., a member of the New York Stock Exchange and other major exchanges, as our correspondent broker-dealer clearing agent (the "Clearing Agent"), and accordingly we have opened an account under your name with our Clearing Agent on a correspondent broker basis pursuant to a written agreement between us and the Clearing Agent.

Under this agreement, the Clearing Agent will: provide cashiering services; monitor compliance of credit according to applicable rules, regulations and policies; prepare and mail trade notifications and periodic account statements; and provide for the dissemination of proxy, tender offer and other similar shareholders' materials. In addition, the Clearing Agent may provide, upon our specific instructions, order execution and/or certificate clearance. However, the Clearing Agent will not be involved with or have responsibility for decisions regarding transactions in your account. Moreover, under no circumstances will we be an agent of the clearing agent nor be in any partnership, association or joint venture relationship with the clearing agent. If the Clearing Agent pays interest on your qualified credit balances left on deposit in your account, for the purpose of pending investment or reinvestment, we may receive an administrative fee that would be in the form of an interest rate decrease of no more than one-half of one percent from the interest rate established for credit balances.

Since you continue to be a customer of our firm, the opening and approval of accounts and the entry of orders and instructions regarding the deposit or withdrawal of securities or money for your account must be handled by us. We will continue to be responsible for all activities in connection with your account, and inquiries or complaints regarding your account should be directed to us. You may access your account online, at any time, by visiting www.myclientlink.com. Please contact us for a password.

You acknowledge that in connection with this Agreement that we, or our Clearing Agent, may submit and collect nonpublic and public information to consumer and industry reporting agencies. Upon your written request, we will inform you if we have obtained information through these inquiries, and if so, we will provide you with the name and address of the consumer and industry reporting agency.

To acknowledge your understanding of these matters and to provide us with your required taxpayer certification and beneficial ownership election, please complete, sign, and return this document to us. Please note, in order to avoid backup withholding taxes imposed by the IRS, we must receive this document within 20 days. If you have any questions, please call us at your convenience.

ACCOUNT AGREEMENT, TAXPAYER CERTIFICATION, AND BENEFICIAL OWNERSHIP ELECTION

Under penalties of perjury, I certify that:

- (1) that the number supplied below is my correct taxpayer identification number, and
- (2) I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service 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 *(IF YOU HAVE BEEN NOTIFIED BY THE IRS THAT YOU ARE SUBJECT TO BACKUP WITHHOLDING, YOU MUST CROSS OUT CERTIFICATION (2) ABOVE.)*
- (3) I am a U.S. Person (including a U.S. Resident Alien)
- (4) Limited Liability Company. Enter the tax classification (C=C Corporation, S= S Corporation, P= Partnership)
- (5) Exemption from FATCA reporting code (if any)

Rule 14b-1(c) of the Securities Exchange Act requires disclosure to requesting companies of the name, address and securities positions of customers who are beneficial owners of that company's securities, unless the customer objects. If you do not object to this disclosure, no action is required. If you do object, please check the box below.

Do not disclose this information to requesting companies.

By signing below, you acknowledge that you have read and received a copy for your records of this agreement and the "Disclosure Statement-Facts About Your Borrowing Costs and Other Matters". You acknowledge your understanding and agreement that 1) your account is to be handled in the manner described in these agreements and 2) the "Disclosure Statement-Facts About Your Borrowing Costs and Other Matters" contains a Pre-dispute Arbitration clause in Paragraph 9, and 3) you understand that such Pre-dispute Arbitration clause will be binding on you upon signing below.

The Internal Revenue Service does not require your consent to any provision of this document other than the certifications required to avoid backup withholding.

ENTITY NAME (If applicable)

PRINT NAME	SOCIAL SECURITY/TAX ID NUMBER	CUSTOMER SIGNATURE - IF ENTITY Account, Please Sign in capacity (TTEE, president, etc.)	DATE
PRINT NAME	SOCIAL SECURITY/TAX ID Number	JOINT CUSTOMER SIGNATURE (IF JOINT ACCOUNT, BOTH MUST SIGN)	DATE
102014 C Letter A	SIGNATURE GUARANTEED BY	(For Broker-Dealer Use Only)	

I.E. Code Account Number

► Go to www.irs.gov/FormW9 for instructions and the latest information.

	2 Business name/disregarded entity name, if different from above						
e. Is on page 3.	 3 Check appropriate box for federal tax classification of the person whose name is entered on line 1. Che following seven boxes. Individual/sole proprietor or C Corporation S Corporation Partnership single-member LLC 	eck only one of the	4 Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3): Exempt payee code (if any)				
Print or type. Specific Instructions	Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=Partner Note: Check the appropriate box in the line above for the tax classification of the single-member ov LLC if the LLC is classified as a single-member LLC that is disregarded from the owner unless the canother LLC that is not disregarded from the owner for U.S. federal tax purposes. Otherwise, a single is disregarded from the owner should check the appropriate box for the tax classification of its own Other (see instructions) ►	Exemption from FATCA reporting code (if any)					
See Spe	5 Address (number, street, and apt. or suite no.) See instructions.	Requester's name a	nd address (optional)				
ю.	6 City, state, and ZIP code						
	7 List account number(s) here (optional)						
Par	Taxpayer Identification Number (TIN)						
	our TIN in the appropriate box. The TIN provided must match the name given on line 1 to av	0.0	urity number				
	p withholding. For individuals, this is generally your social security number (SSN). However, for nt alien, sole proprietor, or disregarded entity, see the instructions for Part I, later. For other	ora					

entities, it is your employer identification number (Ein). If you do not have a number, see how to get a	
TIN, later.	0
Note: If the account is in more than one name, see the instructions for line 1. Also see What Name and	
Number To Give the Requester for guidelines on whose number to enter.	

For other How to get a				-				
	or							
Vhat Name and	Employer identification number							
		_						

Certification Part II

Under penalties of perjury, I certify that:

- 1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me); and
- 2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and
- 3. I am a U.S. citizen or other U.S. person (defined below); and
- 4. The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions for Part II, later.

Sign	Signature of		
Here	U.S. person >		

General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Future developments. For the latest information about developments related to Form W-9 and its instructions, such as legislation enacted after they were published, go to www.irs.gov/FormW9.

Purpose of Form

An individual or entity (Form W-9 requester) who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) which may be your social security number (SSN), individual taxpayer identification number (ITIN), adoption taxpayer identification number (ATIN), or employer identification number (EIN), to report on an information return the amount paid to you, or other amount reportable on an information return. Examples of information returns include, but are not limited to, the following.

• Form 1099-INT (interest earned or paid)

- Form 1099-DIV (dividends, including those from stocks or mutual funds)
- Form 1099-MISC (various types of income, prizes, awards, or gross proceeds)
- Form 1099-B (stock or mutual fund sales and certain other transactions by brokers)
- Form 1099-S (proceeds from real estate transactions)

Date 🕨

- Form 1099-K (merchant card and third party network transactions)
- Form 1098 (home mortgage interest), 1098-E (student loan interest),
- 1098-T (tuition)
- Form 1099-C (canceled debt)
- Form 1099-A (acquisition or abandonment of secured property)
- Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN.

If you do not return Form W-9 to the requester with a TIN, you might be subject to backup withholding. See What is backup withholding, later.

By signing the filled-out form, you:

1. Certify that the TIN you are giving is correct (or you are waiting for a number to be issued),

2. Certify that you are not subject to backup withholding, or

3. Claim exemption from backup withholding if you are a U.S. exempt payee. If applicable, you are also certifying that as a U.S. person, your allocable share of any partnership income from a U.S. trade or business is not subject to the withholding tax on foreign partners' share of effectively connected income, and

4. Certify that FATCA code(s) entered on this form (if any) indicating that you are exempt from the FATCA reporting, is correct. See *What is FATCA reporting*, later, for further information.

Note: If you are a U.S. person and a requester gives you a form other than Form W-9 to request your TIN, you must use the requester's form if it is substantially similar to this Form W-9.

Definition of a U.S. person. For federal tax purposes, you are considered a U.S. person if you are:

• An individual who is a U.S. citizen or U.S. resident alien;

• A partnership, corporation, company, or association created or organized in the United States or under the laws of the United States;

An estate (other than a foreign estate); or

• A domestic trust (as defined in Regulations section 301.7701-7).

Special rules for partnerships. Partnerships that conduct a trade or business in the United States are generally required to pay a withholding tax under section 1446 on any foreign partners' share of effectively connected taxable income from such business. Further, in certain cases where a Form W-9 has not been received, the rules under section 1446 require a partnership to presume that a partner is a foreign person, and pay the section 1446 withholding tax. Therefore, if you are a U.S. person that is a partner in a partnership conducting a trade or business in the United States, provide Form W-9 to the partnership to establish your U.S. status and avoid section 1446 withholding on your share of partnership income.

In the cases below, the following person must give Form W-9 to the partnership for purposes of establishing its U.S. status and avoiding withholding on its allocable share of net income from the partnership conducting a trade or business in the United States.

 In the case of a disregarded entity with a U.S. owner, the U.S. owner of the disregarded entity and not the entity;

• In the case of a grantor trust with a U.S. grantor or other U.S. owner, generally, the U.S. grantor or other U.S. owner of the grantor trust and not the trust; and

• In the case of a U.S. trust (other than a grantor trust), the U.S. trust (other than a grantor trust) and not the beneficiaries of the trust.

Foreign person. If you are a foreign person or the U.S. branch of a foreign bank that has elected to be treated as a U.S. person, do not use Form W-9. Instead, use the appropriate Form W-8 or Form 8233 (see Pub. 515, Withholding of Tax on Nonresident Aliens and Foreign Entities).

Nonresident alien who becomes a resident alien. Generally, only a nonresident alien individual may use the terms of a tax treaty to reduce or eliminate U.S. tax on certain types of income. However, most tax treaties contain a provision known as a "saving clause." Exceptions specified in the saving clause may permit an exemption from tax to continue for certain types of income even after the payee has otherwise become a U.S. resident alien for tax purposes.

If you are a U.S. resident alien who is relying on an exception contained in the saving clause of a tax treaty to claim an exemption from U.S. tax on certain types of income, you must attach a statement to Form W-9 that specifies the following five items.

1. The treaty country. Generally, this must be the same treaty under which you claimed exemption from tax as a nonresident alien.

2. The treaty article addressing the income.

3. The article number (or location) in the tax treaty that contains the saving clause and its exceptions.

4. The type and amount of income that qualifies for the exemption from tax.

5. Sufficient facts to justify the exemption from tax under the terms of the treaty article.

Example. Article 20 of the U.S.-China income tax treaty allows an exemption from tax for scholarship income received by a Chinese student temporarily present in the United States. Under U.S. law, this student will become a resident alien for tax purposes if his or her stay in the United States exceeds 5 calendar years. However, paragraph 2 of the first Protocol to the U.S.-China treaty (dated April 30, 1984) allows the provisions of Article 20 to continue to apply even after the Chinese student becomes a resident alien of the United States. A Chinese student who qualifies for this exception (under paragraph 2 of the first protocol) and is relying on this exception to claim an exemption from tax on his or her scholarship or fellowship income would attach to Form W-9 a statement that includes the information described above to support that exemption.

If you are a nonresident alien or a foreign entity, give the requester the appropriate completed Form W-8 or Form 8233.

Backup Withholding

What is backup withholding? Persons making certain payments to you must under certain conditions withhold and pay to the IRS 24% of such payments. This is called "backup withholding." Payments that may be subject to backup withholding include interest, tax-exempt interest, dividends, broker and barter exchange transactions, rents, royalties, nonemployee pay, payments made in settlement of payment card and third party network transactions, and certain payments from fishing boat operators. Real estate transactions are not subject to backup withholding.

You will not be subject to backup withholding on payments you receive if you give the requester your correct TIN, make the proper certifications, and report all your taxable interest and dividends on your tax return.

Payments you receive will be subject to backup withholding if:

1. You do not furnish your TIN to the requester,

2. You do not certify your TIN when required (see the instructions for Part II for details),

3. The IRS tells the requester that you furnished an incorrect TIN,

4. The IRS tells you that you are subject to backup withholding because you did not report all your interest and dividends on your tax return (for reportable interest and dividends only), or

5. You do not certify to the requester that you are not subject to backup withholding under 4 above (for reportable interest and dividend accounts opened after 1983 only).

Certain payees and payments are exempt from backup withholding. See *Exempt payee code*, later, and the separate Instructions for the Requester of Form W-9 for more information.

Also see Special rules for partnerships, earlier.

What is FATCA Reporting?

The Foreign Account Tax Compliance Act (FATCA) requires a participating foreign financial institution to report all United States account holders that are specified United States persons. Certain payees are exempt from FATCA reporting. See *Exemption from FATCA reporting code*, later, and the Instructions for the Requester of Form W-9 for more information.

Updating Your Information

You must provide updated information to any person to whom you claimed to be an exempt payee if you are no longer an exempt payee and anticipate receiving reportable payments in the future from this person. For example, you may need to provide updated information if you are a C corporation that elects to be an S corporation, or if you no longer are tax exempt. In addition, you must furnish a new Form W-9 if the name or TIN changes for the account; for example, if the grantor of a grantor trust dies.

Penalties

Failure to furnish TIN. If you fail to furnish your correct TIN to a requester, you are subject to a penalty of \$50 for each such failure unless your failure is due to reasonable cause and not to willful neglect.

Civil penalty for false information with respect to withholding. If you make a false statement with no reasonable basis that results in no backup withholding, you are subject to a \$500 penalty.

Criminal penalty for falsifying information. Willfully falsifying certifications or affirmations may subject you to criminal penalties including fines and/or imprisonment.

Misuse of TINs. If the requester discloses or uses TINs in violation of federal law, the requester may be subject to civil and criminal penalties.

Specific Instructions

Line 1

You must enter one of the following on this line; **do not** leave this line blank. The name should match the name on your tax return.

If this Form W-9 is for a joint account (other than an account maintained by a foreign financial institution (FFI)), list first, and then circle, the name of the person or entity whose number you entered in Part I of Form W-9. If you are providing Form W-9 to an FFI to document a joint account, each holder of the account that is a U.S. person must provide a Form W-9.

a. **Individual.** Generally, enter the name shown on your tax return. If you have changed your last name without informing the Social Security Administration (SSA) of the name change, enter your first name, the last name as shown on your social security card, and your new last name.

Note: ITIN applicant: Enter your individual name as it was entered on your Form W-7 application, line 1a. This should also be the same as the name you entered on the Form 1040/1040A/1040EZ you filed with your application.

b. **Sole proprietor or single-member LLC.** Enter your individual name as shown on your 1040/1040A/1040EZ on line 1. You may enter your business, trade, or "doing business as" (DBA) name on line 2.

c. Partnership, LLC that is not a single-member LLC, C corporation, or S corporation. Enter the entity's name as shown on the entity's tax return on line 1 and any business, trade, or DBA name on line 2.

d. **Other entities.** Enter your name as shown on required U.S. federal tax documents on line 1. This name should match the name shown on the charter or other legal document creating the entity. You may enter any business, trade, or DBA name on line 2.

e. **Disregarded entity.** For U.S. federal tax purposes, an entity that is disregarded as an entity separate from its owner is treated as a "disregarded entity." See Regulations section 301.7701-2(c)(2)(iii). Enter the owner's name on line 1. The name of the entity entered on line 1 should never be a disregarded entity. The name on line 1 should be the name shown on the income tax return on which the income should be reported. For example, if a foreign LLC that is treated as a disregarded entity for U.S. federal tax purposes has a single owner that is a U.S. person, the U.S. owner's name is required to be provided on line 1. If the direct owner of the entity is also a disregarded entity, enter the first owner that is not disregarded for federal tax purposes. Enter the disregarded entity's name on line 2, "Business name/disregarded entity name." If the owner of the disregarded entity is a foreign person, the owner must complete an appropriate Form W-8 instead of a Form W-9. This is the case even if the foreign person has a U.S. TIN.

Line 2

If you have a business name, trade name, DBA name, or disregarded entity name, you may enter it on line 2.

Line 3

Check the appropriate box on line 3 for the U.S. federal tax classification of the person whose name is entered on line 1. Check only one box on line 3.

IF the entity/person on line 1 is a(n)	THEN check the box for
Corporation	Corporation
 Individual Sole proprietorship, or Single-member limited liability company (LLC) owned by an individual and disregarded for U.S. federal tax purposes. 	Individual/sole proprietor or single- member LLC
 LLC treated as a partnership for U.S. federal tax purposes, LLC that has filed Form 8832 or 2553 to be taxed as a corporation, or LLC that is disregarded as an entity separate from its owner but the owner is another LLC that is not disregarded for U.S. federal tax purposes. 	Limited liability company and enter the appropriate tax classification. (P= Partnership; C= C corporation; or S= S corporation)
Partnership	Partnership
Trust/estate	Trust/estate

Line 4, Exemptions

If you are exempt from backup withholding and/or FATCA reporting, enter in the appropriate space on line 4 any code(s) that may apply to you.

Exempt payee code.

• Generally, individuals (including sole proprietors) are not exempt from backup withholding.

• Except as provided below, corporations are exempt from backup withholding for certain payments, including interest and dividends.

• Corporations are not exempt from backup withholding for payments made in settlement of payment card or third party network transactions.

• Corporations are not exempt from backup withholding with respect to attorneys' fees or gross proceeds paid to attorneys, and corporations that provide medical or health care services are not exempt with respect to payments reportable on Form 1099-MISC.

The following codes identify payees that are exempt from backup withholding. Enter the appropriate code in the space in line 4.

1 - An organization exempt from tax under section 501(a), any IRA, or a custodial account under section 403(b)(7) if the account satisfies the requirements of section 401(f)(2)

2-The United States or any of its agencies or instrumentalities

3-A state, the District of Columbia, a U.S. commonwealth or possession, or any of their political subdivisions or instrumentalities

4-A foreign government or any of its political subdivisions, agencies, or instrumentalities

5-A corporation

6—A dealer in securities or commodities required to register in the United States, the District of Columbia, or a U.S. commonwealth or possession

 $7\!-\!\text{A}$ futures commission merchant registered with the Commodity Futures Trading Commission

8-A real estate investment trust

9—An entity registered at all times during the tax year under the Investment Company Act of 1940

10-A common trust fund operated by a bank under section 584(a)

11-A financial institution

12-A middleman known in the investment community as a nominee or custodian

13—A trust exempt from tax under section 664 or described in section 4947

The following chart shows types of payments that may be exempt from backup withholding. The chart applies to the exempt payees listed above, 1 through 13.

IF the payment is for	THEN the payment is exempt for
Interest and dividend payments	All exempt payees except for 7
Broker transactions	Exempt payees 1 through 4 and 6 through 11 and all C corporations. S corporations must not enter an exempt payee code because they are exempt only for sales of noncovered securities acquired prior to 2012.
Barter exchange transactions and patronage dividends	Exempt payees 1 through 4
Payments over \$600 required to be reported and direct sales over \$5,000 ¹	Generally, exempt payees 1 through 5 ²
Payments made in settlement of payment card or third party network transactions	Exempt payees 1 through 4

¹ See Form 1099-MISC, Miscellaneous Income, and its instructions.

² However, the following payments made to a corporation and reportable on Form 1099-MISC are not exempt from backup withholding: medical and health care payments, attorneys' fees, gross proceeds paid to an attorney reportable under section 6045(f), and payments for services paid by a federal executive agency.

Exemption from FATCA reporting code. The following codes identify payees that are exempt from reporting under FATCA. These codes apply to persons submitting this form for accounts maintained outside of the United States by certain foreign financial institutions. Therefore, if you are only submitting this form for an account you hold in the United States, you may leave this field blank. Consult with the person requesting this form if you are uncertain if the financial institution is subject to these requirements. A requester may indicate that a code is not required by providing you with a Form W-9 with "Not Applicable" (or any similar indication) written or printed on the line for a FATCA exemption code.

A—An organization exempt from tax under section 501(a) or any individual retirement plan as defined in section 7701(a)(37)

B-The United States or any of its agencies or instrumentalities

C-A state, the District of Columbia, a U.S. commonwealth or possession, or any of their political subdivisions or instrumentalities

D-A corporation the stock of which is regularly traded on one or more established securities markets, as described in Regulations section 1.1472-1(c)(1)(i)

E-A corporation that is a member of the same expanded affiliated group as a corporation described in Regulations section 1.1472-1(c)(1)(i)

F-A dealer in securities, commodities, or derivative financial instruments (including notional principal contracts, futures, forwards, and options) that is registered as such under the laws of the United States or any state

G-A real estate investment trust

H-A regulated investment company as defined in section 851 or an entity registered at all times during the tax year under the Investment Company Act of 1940

I-A common trust fund as defined in section 584(a)

J—A bank as defined in section 581

K–A broker

L-A trust exempt from tax under section 664 or described in section 4947(a)(1)

M-A tax exempt trust under a section 403(b) plan or section 457(g) plan

Note: You may wish to consult with the financial institution requesting this form to determine whether the FATCA code and/or exempt payee code should be completed.

Line 5

Enter your address (number, street, and apartment or suite number). This is where the requester of this Form W-9 will mail your information returns. If this address differs from the one the requester already has on file, write NEW at the top. If a new address is provided, there is still a chance the old address will be used until the payor changes your address in their records.

Line 6

Enter your city, state, and ZIP code.

Part I. Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. If you are a resident alien and you do not have and are not eligible to get an SSN, your TIN is your IRS individual taxpayer identification number (ITIN). Enter it in the social security number box. If you do not have an ITIN, see *How to get a TIN* below.

If you are a sole proprietor and you have an EIN, you may enter either your SSN or EIN.

If you are a single-member LLC that is disregarded as an entity separate from its owner, enter the owner's SSN (or EIN, if the owner has one). Do not enter the disregarded entity's EIN. If the LLC is classified as a corporation or partnership, enter the entity's EIN.

Note: See *What Name and Number To Give the Requester,* later, for further clarification of name and TIN combinations.

How to get a TIN. If you do not have a TIN, apply for one immediately. To apply for an SSN, get Form SS-5, Application for a Social Security Card, from your local SSA office or get this form online at *www.SSA.gov.* You may also get this form by calling 1-800-772-1213. Use Form W-7, Application for IRS Individual Taxpayer Identification Number, to apply for an ITIN, or Form SS-4, Application for Employer Identification Number, to apply for an EIN. You can apply for an EIN online by accessing the IRS website at *www.irs.gov/Businesses* and clicking on Employer Identification Number (EIN) under Starting a Business. Go to *www.irs.gov/Forms* to view, download, or print Form W-7 and/or Form SS-4. Or, you can go to *www.irs.gov/OrderForms* to place an order and have Form W-7 and/or SS-4 mailed to you within 10 business days.

If you are asked to complete Form W-9 but do not have a TIN, apply for a TIN and write "Applied For" in the space for the TIN, sign and date the form, and give it to the requester. For interest and dividend payments, and certain payments made with respect to readily tradable instruments, generally you will have 60 days to get a TIN and give it to the requester before you are subject to backup withholding on payments. The 60-day rule does not apply to other types of payments. You will be subject to backup withholding on all such payments until you provide your TIN to the requester.

Note: Entering "Applied For" means that you have already applied for a TIN or that you intend to apply for one soon.

Caution: A disregarded U.S. entity that has a foreign owner must use the appropriate Form W-8.

Part II. Certification

To establish to the withholding agent that you are a U.S. person, or resident alien, sign Form W-9. You may be requested to sign by the withholding agent even if item 1, 4, or 5 below indicates otherwise.

For a joint account, only the person whose TIN is shown in Part I should sign (when required). In the case of a disregarded entity, the person identified on line 1 must sign. Exempt payees, see *Exempt payee code*, earlier.

Signature requirements. Complete the certification as indicated in items 1 through 5 below.

1. Interest, dividend, and barter exchange accounts opened before 1984 and broker accounts considered active during 1983. You must give your correct TIN, but you do not have to sign the certification.

2. Interest, dividend, broker, and barter exchange accounts opened after 1983 and broker accounts considered inactive during 1983. You must sign the certification or backup withholding will apply. If you are subject to backup withholding and you are merely providing your correct TIN to the requester, you must cross out item 2 in the certification before signing the form.

3. Real estate transactions. You must sign the certification. You may cross out item 2 of the certification.

4. Other payments. You must give your correct TIN, but you do not have to sign the certification unless you have been notified that you have previously given an incorrect TIN. "Other payments" include payments made in the course of the requester's trade or business for rents, royalties, goods (other than bills for merchandise), medical and health care services (including payments to corporations), payments to a nonemployee for services, payments made in settlement of payment card and third party network transactions, payments to certain fishing boat crew members and fishermen, and gross proceeds paid to attorneys (including payments to corporations).

5. Mortgage interest paid by you, acquisition or abandonment of secured property, cancellation of debt, qualified tuition program payments (under section 529), ABLE accounts (under section 529A), IRA, Coverdell ESA, Archer MSA or HSA contributions or distributions, and pension distributions. You must give your correct TIN, but you do not have to sign the certification.

What Name and Number To Give the Requester

For this type of account:	Give name and SSN of:
1. Individual	The individual
 Two or more individuals (joint account) other than an account maintained by an FFI 	The actual owner of the account or, if combined funds, the first individual on the account ¹
3. Two or more U.S. persons (joint account maintained by an FFI)	Each holder of the account
4. Custodial account of a minor (Uniform Gift to Minors Act)	The minor ²
5. a. The usual revocable savings trust (grantor is also trustee)	The grantor-trustee ¹
b. So-called trust account that is not a legal or valid trust under state law	The actual owner ¹
6. Sole proprietorship or disregarded entity owned by an individual	The owner ³
7. Grantor trust filing under Optional Form 1099 Filing Method 1 (see Regulations section 1.671-4(b)(2)(i) (A))	The grantor*
For this type of account:	Give name and EIN of:
8. Disregarded entity not owned by an individual	The owner
9. A valid trust, estate, or pension trust	Legal entity ⁴
10. Corporation or LLC electing corporate status on Form 8832 or Form 2553	The corporation
11. Association, club, religious, charitable, educational, or other tax- exempt organization	The organization
12. Partnership or multi-member LLC	The partnership
13. A broker or registered nominee	The broker or nominee

For this type of account:	Give name and EIN of:
14. Account with the Department of Agriculture in the name of a public entity (such as a state or local government, school district, or prison) that receives agricultural program payments	The public entity
 Grantor trust filing under the Form 1041 Filing Method or the Optional Form 1099 Filing Method 2 (see Regulations section 1.671-4(b)(2)(i)(B)) 	The trust

¹ List first and circle the name of the person whose number you furnish. If only one person on a joint account has an SSN, that person's number must be furnished.

² Circle the minor's name and furnish the minor's SSN.

³ You must show your individual name and you may also enter your business or DBA name on the "Business name/disregarded entity" name line. You may use either your SSN or EIN (if you have one), but the IRS encourages you to use your SSN.

⁴ List first and circle the name of the trust, estate, or pension trust. (Do not furnish the TIN of the personal representative or trustee unless the legal entity itself is not designated in the account title.) Also see *Special rules for partnerships*, earlier.

*Note: The grantor also must provide a Form W-9 to trustee of trust.

Note: If no name is circled when more than one name is listed, the number will be considered to be that of the first name listed.

Secure Your Tax Records From Identity Theft

Identity theft occurs when someone uses your personal information such as your name, SSN, or other identifying information, without your permission, to commit fraud or other crimes. An identity thief may use your SSN to get a job or may file a tax return using your SSN to receive a refund.

To reduce your risk:

- Protect your SSN,
- · Ensure your employer is protecting your SSN, and
- Be careful when choosing a tax preparer.

If your tax records are affected by identity theft and you receive a notice from the IRS, respond right away to the name and phone number printed on the IRS notice or letter.

If your tax records are not currently affected by identity theft but you think you are at risk due to a lost or stolen purse or wallet, questionable credit card activity or credit report, contact the IRS Identity Theft Hotline at 1-800-908-4490 or submit Form 14039.

For more information, see Pub. 5027, Identity Theft Information for Taxpayers.

Victims of identity theft who are experiencing economic harm or a systemic problem, or are seeking help in resolving tax problems that have not been resolved through normal channels, may be eligible for Taxpayer Advocate Service (TAS) assistance. You can reach TAS by calling the TAS toll-free case intake line at 1-877-777-4778 or TTY/TDD 1-800-829-4059.

Protect yourself from suspicious emails or phishing schemes. Phishing is the creation and use of email and websites designed to mimic legitimate business emails and websites. The most common act is sending an email to a user falsely claiming to be an established legitimate enterprise in an attempt to scam the user into surrendering private information that will be used for identity theft. The IRS does not initiate contacts with taxpayers via emails. Also, the IRS does not request personal detailed information through email or ask taxpayers for the PIN numbers, passwords, or similar secret access information for their credit card, bank, or other financial accounts.

If you receive an unsolicited email claiming to be from the IRS, forward this message to *phishing@irs.gov*. You may also report misuse of the IRS name, logo, or other IRS property to the Treasury Inspector General for Tax Administration (TIGTA) at 1-800-366-4484. You can forward suspicious emails to the Federal Trade Commission at *spam@uce.gov* or report them at *www.ftc.gov/complaint*. You can contact the FTC at *www.ftc.gov/idtheft* or 877-IDTHEFT (877-438-4338). If you have been the victim of identity theft, see *www.ldentityTheft.gov* and Pub. 5027.

Visit *www.irs.gov/IdentityTheft* to learn more about identity theft and how to reduce your risk.

Privacy Act Notice

Section 6109 of the Internal Revenue Code requires you to provide your correct TIN to persons (including federal agencies) who are required to file information returns with the IRS to report interest, dividends, or certain other income paid to you; mortgage interest you paid; the acquisition or abandonment of secured property; the cancellation of debt; or contributions you made to an IRA, Archer MSA, or HSA. The person collecting this form uses the information on the form to file information returns with the IRS, reporting the above information. Routine uses of this information include giving it to the Department of Justice for civil and criminal litigation and to cities, states, the District of Columbia, and U.S. commonwealths and possessions for use in administering their laws. The information also may be disclosed to other countries under a treaty, to federal and state agencies to enforce civil and criminal laws, or to federal law enforcement and intelligence agencies to combat terrorism. You must provide your TIN whether or not you are required to file a tax return. Under section 3406, payers must generally withhold a percentage of taxable interest, dividend, and certain other payments to a payee who does not give a TIN to the payer. Certain penalties may also apply for providing false or fraudulent information.

Form W-8BEN-E Certificate of Status of Beneficial Owner for (Rev. July 2017) United States Tax Withholding and Reporting (Entities) Popartment of the Treasury For use by entities. Individuals must use Form W-8BEN. > Section references are to the Internal Revenue Code. Internal Revenue Service Go to www.irs.gov/FormW8BENE for instructions and the latest information. > Give this form to the withholding agent or payer. Do not send to the IRS.						OMB No. 1545-1621
Do NC	OT use this form fo	r:				Instead use Form:
• U.S.	entity or U.S. citizer	n or resident				W-9
	eign individual					EN (Individual) or Form 8233
	reign individual or er ess claiming treaty b	ntity claiming that income is ef enefits)	fectively connected wit	h the conduct o	f trade or business within the	U.S. W-8ECI
• A for gove 501(d	reign government, ir ernment of a U.S. po c), 892, 895, or 1443	foreign simple trust, or a foreign iternational organization, foreign ssession claiming that income B(b) (unless claiming treaty ber intermediary (including a qual	gn central bank of issue is effectively connected nefits) (see instructions	e, foreign tax-ex ed U.S. income of for other except	empt organization, foreign pr or that is claiming the applica tions)	ivate foundation, or bility of section(s) 115(2), W-8ECI or W-8EXF
Pa	rt Identifie	cation of Beneficial Ow	ner			
1		tion that is the beneficial owne			2 Country of incorporatio	n or organization
3	Name of disregarc	led entity receiving the payme	nt (if applicable, see in:	structions)		
4	Simple trust	regarded entity, partnership, si	rganization Priv	poration nplex trust ate foundation rrust above, is th	 Disregarded entity Estate International organiz ne entity a hybrid making a transmission 	
	claim? If "Yes" co	•				🗌 Yes 🔲 No
5	Nonparticipati FFI other than exempt benef		d to a Reporting IGA	Nonrepor	ting IGA FFI. Complete Part > overnment, government of a ink of issue. Complete Part X	U.S. possession, or foreign
	Participating F				nal organization. Complete P	
	Reporting Mo			_	etirement plans. Complete Pa	
	_ •	emed-compliant FFI (other tha d FFI, or nonreporting IGA FFI		Territory f Excepted	Ily owned by exempt beneficia inancial institution. Complete nonfinancial group entity. Co nonfinancial start-up compa	Part XVII. mplete Part XVIII.
		I. Complete Part IV. ned-compliant nonregistering I	local bank. Complete	Complete		
		ned-compliant FFI with only lo	w-value accounts.	Nonprofit	anization. Complete Part XX organization. Complete Part raded NFFE or NFFE affiliate	XXII.
	Certified deen vehicle. Comp	ned-compliant sponsored, clos blete Part V II.	sely held investment		on. Complete Part XXIII. territory NFFE. Complete Pa	rt XXIV.
	Complete Part			Passive N	FE. Complete Part XXV. IFFE. Complete Part XXVI.	
	Complete Part		n financial accounts.	Direct rep	inter-affiliate FFI. Complete I orting NFFE.	
		nented FFI. Complete Part X.			d direct reporting NFFE. Con	
6		tributor. Complete Part XI. ce address (street, apt. or suite r	no., or rural route). Do n o		<u>hat is not a financial account</u> x or in-care-of address (other	
	City or town, state	or province. Include postal co	ode where appropriate.		Country	
7	Mailing address (if	different from above)				
	City or town, state	or province. Include postal co	ode where appropriate.		Country	
8	U.S. taxpayer identif	ication number (TIN), if required	9a GIIN		b Fore	ign T I N
10	Reference number(s	s) (see instructions)	,			
Note:	Please complete rei	mainder of the form including	signing the form in Par	XXX.		

For Paperwork Reduction Act Notice, see separate instructions.

Form W	/-8BEN-E (Rev. 7-2017)		Page 2
Par		Receiving Payment. (Complete on ner than the FFI's country of resident of resident the resident of the reside	only if a disregarded entity with a GIIN or a dence. See instructions.)
11	Chapter 4 Status (FATCA status) of disregarded	entity or branch receiving payment	
	\Box Branch treated as nonparticipating FFI.	Reporting Model 1 FFI.	U.S. Branch.
	Participating FFI.	Reporting Model 2 FFI.	
12	Address of disregarded entity or branch (street, registered address).	, apt. or suite no., or rural route). Do not	t use a P.O. box or in-care-of address (other than a
	City or town, state or province. Include postal co	ode where appropriate.	
	Country		
13	GIIN (if any)		
Par	Claim of Tax Treaty Benefits (i	f applicable). (For chapter 3 purp	oses only.)
14	I certify that (check all that apply):		
а	The beneficial owner is a resident of		within the meaning of the income tax
	treaty between the United States and that co	ountry.	
b		with limitation on benefits. The following	benefits are claimed, and, if applicable, meets the are types of limitation on benefits provisions that may
	Government	Company that meets the ownershi	p and base erosion test
	Tax exempt pension trust or pension fund	Company that meets the derivative	e benefits test
	Other tax exempt organization	Company with an item of income t	hat meets active trade or business test
	Publicly traded corporation		tion by the U.S. competent authority received
	Subsidiary of a publicly traded corporation	Other (specify Article and paragrap	
С	☐ The beneficial owner is claiming treaty bene or business of a foreign corporation and me		rom a foreign corporation or interest from a U.S. trade ons).
15	Special rates and conditions (if applicable-se		
	The beneficial owner is claiming the provisions of		
	of the treaty identified on line 14a above to claim		ling on (specify type of income):
	Explain the additional conditions in the Article th		
Par	IV Sponsored FFI		
16	Name of sponsoring entity:		
17	Check whichever box applies.		
	I certify that the entity identified in Part I:		
	 Is an investment entity; 		
	• Is not a QI, WP (except to the extent permitted		
	• Has agreed with the entity identified above (tha	at is not a nonparticipating FFI) to act as t	the sponsoring entity for this entity.
	I certify that the entity identified in Part I:		
	 Is a controlled foreign corporation as defined in Is not a OL WP, or WT; 	n section 957 (a);	
	 Is not a QI, WP, or WT; Is whelly exceed directly or indirectly, by the US 	financial institution identified shows that	agreen to get as the energy ing antity for this antity and
	- is wholly owned, directly or indirectly, by the U.S	. mancial institution identified above that a	agrees to act as the sponsoring entity for this entity; and

• Shares a common electronic account system with the sponsoring entity (identified above) that enables the sponsoring entity to identify all account holders and payees of the entity and to access all account and customer information maintained by the entity including, but not limited to, customer identification information, customer documentation, account balance, and all payments made to account holders or payees.

Part V Certified Deemed-Compliant Nonregistering Local Bank

18 I certify that the FFI identified in Part I:

• Operates and is licensed solely as a bank or credit union (or similar cooperative credit organization operated without profit) in its country of incorporation or organization;

• Engages primarily in the business of receiving deposits from and making loans to, with respect to a bank, retail customers unrelated to such bank and, with respect to a credit union or similar cooperative credit organization, members, provided that no member has a greater than 5% interest in such credit union or cooperative credit organization;

• Does not solicit account holders outside its country of organization;

• Has no fixed place of business outside such country (for this purpose, a fixed place of business does not include a location that is not advertised to the public and from which the FFI performs solely administrative support functions);

• Has no more than \$175 million in assets on its balance sheet and, if it is a member of an expanded affiliated group, the group has no more than \$500 million in total assets on its consolidated or combined balance sheets; **and**

• Does not have any member of its expanded affiliated group that is a foreign financial institution, other than a foreign financial institution that is incorporated or organized in the same country as the FFI identified in Part I and that meets the requirements set forth in this part.

Part VI Certified Deemed-Compliant FFI with Only Low-Value Accounts

19 I certify that the FFI identified in Part I:

• Is not engaged primarily in the business of investing, reinvesting, or trading in securities, partnership interests, commodities, notional principal contracts, insurance or annuity contracts, or any interest (including a futures or forward contract or option) in such security, partnership interest, commodity, notional principal contract, insurance contract or annuity contract;

• No financial account maintained by the FFI or any member of its expanded affiliated group, if any, has a balance or value in excess of \$50,000 (as determined after applying applicable account aggregation rules); and

• Neither the FFI nor the entire expanded affiliated group, if any, of the FFI, have more than \$50 million in assets on its consolidated or combined balance sheet as of the end of its most recent accounting year.

Part VII Certified Deemed-Compliant Sponsored, Closely Held Investment Vehicle

20 Name of sponsoring entity:

21

22

23

- I certify that the entity identified in Part I:
 - Is an FFI solely because it is an investment entity described in Regulations section 1.1471-5(e)(4);
 - Is not a QI, WP, or WT;

• Will have all of its due diligence, withholding, and reporting responsibilities (determined as if the FFI were a participating FFI) fulfilled by the sponsoring entity identified on line 20; and

• 20 or fewer individuals own all of the debt and equity interests in the entity (disregarding debt interests owned by U.S. financial institutions, participating FFIs, registered deemed-compliant FFIs, and certified deemed-compliant FFIs and equity interests owned by an entity if that entity owns 100% of the equity interests in the FFI and is itself a sponsored FFI).

Part VIII Certified Deemed-Compliant Limited Life Debt Investment Entity

I certify that the entity identified in Part I:

• Was in existence as of January 17, 2013;

Issued all classes of its debt or equity interests to investors on or before January 17, 2013, pursuant to a trust indenture or similar agreement; and
Is certified deemed-compliant because it satisfies the requirements to be treated as a limited life debt investment entity (such as the restrictions with respect to its assets and other requirements under Regulations section 1.1471-5(f)(2)(iv)).

Part IX Certain Investment Entities that Do Not Maintain Financial Accounts

I certify that the entity identified in Part I:

• Is a financial institution solely because it is an investment entity described in Regulations section 1.1471-5(e)(4)(i)(A), and

Does not maintain financial accounts. Part X Owner-Documented FFI

Note: This status only applies if the U.S. financial institution, participating FFI, or reporting Model 1 FFI to which this form is given has agreed that it will treat the FFI as an owner-documented FFI (see instructions for eligibility requirements). In addition, the FFI must make the certifications below.

24a (All owner-documented FFIs check here) I certify that the FFI identified in Part I:

- Does not act as an intermediary;
- Does not accept deposits in the ordinary course of a banking or similar business;
- Does not hold, as a substantial portion of its business, financial assets for the account of others;

• Is not an insurance company (or the holding company of an insurance company) that issues or is obligated to make payments with respect to a financial account;

• Is not owned by or in an expanded affiliated group with an entity that accepts deposits in the ordinary course of a banking or similar business, holds, as a substantial portion of its business, financial assets for the account of others, or is an insurance company (or the holding company of an insurance company) that issues or is obligated to make payments with respect to a financial account;

• Does not maintain a financial account for any nonparticipating FFI; and

• Does not have any specified U.S. persons that own an equity interest or debt interest (other than a debt interest that is not a financial account or that has a balance or value not exceeding \$50,000) in the FFI other than those identified on the FFI owner reporting statement.

Part X Owner-Documented FFI (continued)

Check box 24b or 24c, whichever applies.

- **b** I certify that the FFI identified in Part I:
 - Has provided, or will provide, an FFI owner reporting statement that contains:
 - (i) The name, address, TIN (if any), chapter 4 status, and type of documentation provided (if required) of every individual and specified U.S. person that owns a direct or indirect equity interest in the owner-documented FFI (looking through all entities other than specified U.S. persons);
 - (ii) The name, address, TIN (if any), and chapter 4 status of every individual and specified U.S. person that owns a debt interest in the owner-documented FFI (including any indirect debt interest, which includes debt interests in any entity that directly or indirectly owns the payee or any direct or indirect equity interest in a debt holder of the payee) that constitutes a financial account in excess of \$50,000 (disregarding all such debt interests owned by participating FFIs, registered deemed-compliant FFIs, certified deemed-compliant FFIs, excepted NFFEs, exempt beneficial owners, or U.S. persons other than specified U.S. persons); and
 - (iii) Any additional information the withholding agent requests in order to fulfill its obligations with respect to the entity.

• Has provided, or will provide, valid documentation meeting the requirements of Regulations section 1.1471-3(d)(6)(iii) for each person identified in the FFI owner reporting statement.

c I certify that the FFI identified in Part I has provided, or will provide, an auditor's letter, signed within 4 years of the date of payment, from an independent accounting firm or legal representative with a location in the United States stating that the firm or representative has reviewed the FFI's documentation with respect to all of its owners and debt holders identified in Regulations section 1.1471-3(d)(6)(iv)(A)(2), and that the FFI meets all the requirements to be an owner-documented FFI. The FFI identified in Part I has also provided, or will provide, an FFI owner reporting statement of its owners that are specified U.S. persons and Form(s) W-9, with applicable waivers.

Check box 24d if applicable (optional, see instructions).

d I certify that the entity identified on line 1 is a trust that does not have any contingent beneficiaries or designated classes with unidentified beneficiaries.

Part X Restricted Distributor

25a

(All restricted distributors check here) I certify that the entity identified in Part I:

- Operates as a distributor with respect to debt or equity interests of the restricted fund with respect to which this form is furnished;
- Provides investment services to at least 30 customers unrelated to each other and less than half of its customers are related to each other;

• Is required to perform AML due diligence procedures under the anti-money laundering laws of its country of organization (which is an FATF-compliant jurisdiction);

• Operates solely in its country of incorporation or organization, has no fixed place of business outside of that country, and has the same country of incorporation or organization as all members of its affiliated group, if any;

• Does not solicit customers outside its country of incorporation or organization;

• Has no more than \$175 million in total assets under management and no more than \$7 million in gross revenue on its income statement for the most recent accounting year;

• Is not a member of an expanded affiliated group that has more than \$500 million in total assets under management or more than \$20 million in gross revenue for its most recent accounting year on a combined or consolidated income statement; and

• Does not distribute any debt or securities of the restricted fund to specified U.S. persons, passive NFFEs with one or more substantial U.S. owners, or nonparticipating FFIs.

Check box 25b or 25c, whichever applies.

I further certify that with respect to all sales of debt or equity interests in the restricted fund with respect to which this form is furnished that are made after December 31, 2011, the entity identified in Part I:

- **b** Has been bound by a distribution agreement that contained a general prohibition on the sale of debt or securities to U.S. entities and U.S. resident individuals and is currently bound by a distribution agreement that contains a prohibition of the sale of debt or securities to any specified U.S. person, passive NFFE with one or more substantial U.S. owners, or nonparticipating FFI.
- c Is currently bound by a distribution agreement that contains a prohibition on the sale of debt or securities to any specified U.S. person, passive NFFE with one or more substantial U.S. owners, or nonparticipating FFI and, for all sales made prior to the time that such a restriction was included in its distribution agreement, has reviewed all accounts related to such sales in accordance with the procedures identified in Regulations section 1.1471-4(c) applicable to preexisting accounts and has redeemed or retired any, or caused the restricted fund to transfer the securities to a distributor that is a participating FFI or reporting Model 1 FFI securities which were sold to specified U.S. persons, passive NFFEs with one or more substantial U.S. owners, or nonparticipating FFIs.

Part XII Nonreporting IGA FFI

26 \Box I certify that the entity identified in Part I:

• Meets the requirements to be considered a nonreporting financial institution pursuant to an applicable IGA between the United States and

is treated as a

(if applicable, see instructions);

The trustee is: U.S. Foreign

Part XIII Foreign Government, Government of a U.S. Possession, or Foreign Central Bank of Issue

27 I certify that the entity identified in Part I is the beneficial owner of the payment, and is not engaged in commercial financial activities of a type engaged in by an insurance company, custodial institution, or depository institution with respect to the payments, accounts, or obligations for which this form is submitted (except as permitted in Regulations section 1.1471-6(h)(2)).

Part XIV International Organization

Check box 28a or 28b, whichever applies.

28a I certify that the entity identified in Part I is an international organization described in section 7701(a)(18).

- **b I** certify that the entity identified in Part I:
 - Is comprised primarily of foreign governments;

• Is recognized as an intergovernmental or supranational organization under a foreign law similar to the International Organizations Immunities Act or that has in effect a headquarters agreement with a foreign government;

• The benefit of the entity's income does not inure to any private person; and

• Is the beneficial owner of the payment and is not engaged in commercial financial activities of a type engaged in by an insurance company, custodial institution, or depository institution with respect to the payments, accounts, or obligations for which this form is submitted (except as permitted in Regulations section 1.1471-6(h)(2)).

Part XV Exempt Retirement Plans

Check box 29a, b, c, d, e, or f, whichever applies.

29a Certify that the entity identified in Part I:

- Is established in a country with which the United States has an income tax treaty in force (see Part III if claiming treaty benefits);
- Is operated principally to administer or provide pension or retirement benefits; and

• Is entitled to treaty benefits on income that the fund derives from U.S. sources (or would be entitled to benefits if it derived any such income) as a resident of the other country which satisfies any applicable limitation on benefits requirement.

b l certify that the entity identified in Part **l**:

• Is organized for the provision of retirement, disability, or death benefits (or any combination thereof) to beneficiaries that are former employees of one or more employers in consideration for services rendered;

• No single beneficiary has a right to more than 5% of the FFI's assets;

• Is subject to government regulation and provides annual information reporting about its beneficiaries to the relevant tax authorities in the country in which the fund is established or operated; and

- (i) Is generally exempt from tax on investment income under the laws of the country in which it is established or operates due to its status as a retirement or pension plan;
- (ii) Receives at least 50% of its total contributions from sponsoring employers (disregarding transfers of assets from other plans described in this part, retirement and pension accounts described in an applicable Model 1 or Model 2 IGA, other retirement funds described in an applicable Model 1 or Model 2 IGA, or accounts described in Regulations section 1.1471-5(b)(2)(i)(A));
- (iii) Either does not permit or penalizes distributions or withdrawals made before the occurrence of specified events related to retirement, disability, or death (except rollover distributions to accounts described in Regulations section 1.1471-5(b)(2)(i)(A) (referring to retirement and pension accounts), to retirement and pension accounts described in an applicable Model 1 or Model 2 IGA, or to other retirement funds described in this part or in an applicable Model 1 or Model 2 IGA); or

(iv) Limits contributions by employees to the fund by reference to earned income of the employee or may not exceed \$50,000 annually.

I certify that the entity identified in Part I:

• Is organized for the provision of retirement, disability, or death benefits (or any combination thereof) to beneficiaries that are former employees of one or more employers in consideration for services rendered;

- Has fewer than 50 participants;
- Is sponsored by one or more employers each of which is not an investment entity or passive NFFE;

• Employee and employer contributions to the fund (disregarding transfers of assets from other plans described in this part, retirement and pension accounts described in an applicable Model 1 or Model 2 IGA, or accounts described in Regulations section 1.1471-5(b)(2)(i)(A)) are limited by reference to earned income and compensation of the employee, respectively;

• Participants that are not residents of the country in which the fund is established or operated are not entitled to more than 20% of the fund's assets; and

• Is subject to government regulation and provides annual information reporting about its beneficiaries to the relevant tax authorities in the country in which the fund is established or operates.

. The applicable IGA is a Model 1 IGA or a Model 2 IGA; and

under the provisions of the applicable IGA or Treasury regulations

Part XV Exempt Retirement Plans (continued)

- d I certify that the entity identified in Part I is formed pursuant to a pension plan that would meet the requirements of section 401(a), other than the requirement that the plan be funded by a trust created or organized in the United States.
- e I certify that the entity identified in Part I is established exclusively to earn income for the benefit of one or more retirement funds

described in this part or in an applicable Model 1 or Model 2 IGA, or accounts described in Regulations section 1.1471-5(b)(2)(i)(A) (referring to retirement and pension accounts), or retirement and pension accounts described in an applicable Model 1 or Model 2 IGA.

f I certify that the entity identified in Part **I**:

• Is established and sponsored by a foreign government, international organization, central bank of issue, or government of a U.S. possession (each as defined in Regulations section 1.1471-6) or an exempt beneficial owner described in an applicable Model 1 or Model 2 IGA to provide retirement, disability, or death benefits to beneficiaries or participants that are current or former employees of the sponsor (or persons designated by such employees); or

• Is established and sponsored by a foreign government, international organization, central bank of issue, or government of a U.S. possession (each as defined in Regulations section 1.1471-6) or an exempt beneficial owner described in an applicable Model 1 or Model 2 IGA to provide retirement, disability, or death benefits to beneficiaries or participants that are not current or former employees of such sponsor, but are in consideration of personal services performed for the sponsor.

Part XVI Entity Wholly Owned by Exempt Beneficial Owners

30 I certify that the entity identified in Part I:

• Is an FFI solely because it is an investment entity;

• Each direct holder of an equity interest in the investment entity is an exempt beneficial owner described in Regulations section 1.1471-6 or in an applicable Model 1 or Model 2 IGA;

• Each direct holder of a debt interest in the investment entity is either a depository institution (with respect to a loan made to such entity) or an exempt beneficial owner described in Regulations section 1.1471-6 or an applicable Model 1 or Model 2 IGA.

• Has provided an owner reporting statement that contains the name, address, TIN (if any), chapter 4 status, and a description of the type of documentation provided to the withholding agent for every person that owns a debt interest constituting a financial account or direct equity interest in the entity; and

• Has provided documentation establishing that every owner of the entity is an entity described in Regulations section 1.1471-6(b), (c), (d), (e), (f) and/or (g) without regard to whether such owners are beneficial owners.

Part XVII Territory Financial Institution

I certify that the entity identified in Part I is a financial institution (other than an investment entity) that is incorporated or organized under

the laws of a possession of the United States.

Part XVIII Excepted Nonfinancial Group Entity

32 I certify that the entity identified in Part I:

31

• Is a holding company, treasury center, or captive finance company and substantially all of the entity's activities are functions described in Regulations section 1.1471-5(e)(5)(i)(C) through (E);

- Is a member of a nonfinancial group described in Regulations section 1.1471-5(e)(5)(i)(B);
- Is not a depository or custodial institution (other than for members of the entity's expanded affiliated group); and

• Does not function (or hold itself out) as an investment fund, such as a private equity fund, venture capital fund, leveraged buyout fund, or any investment vehicle with an investment strategy to acquire or fund companies and then hold interests in those companies as capital assets for investment purposes.

Part XIX Excepted Nonfinancial Start-Up Company

33 I certify that the entity identified in Part I:

• Was formed on (or, in the case of a new line of business, the date of board resolution approving the new line of business)

(date must be less than 24 months prior to date of payment);

• Is not yet operating a business and has no prior operating history or is investing capital in assets with the intent to operate a new line of business other than that of a financial institution or passive NFFE;

• Is investing capital into assets with the intent to operate a business other than that of a financial institution; and

• Does not function (or hold itself out) as an investment fund, such as a private equity fund, venture capital fund, leveraged buyout fund, or any investment vehicle whose purpose is to acquire or fund companies and then hold interests in those companies as capital assets for investment purposes.

Part XX Excepted Nonfinancial Entity in Liquidation or Bankruptcy

34 I certify that the entity identified in Part I:

- Filed a plan of liquidation, filed a plan of reorganization, or filed for bankruptcy on
- During the past 5 years has not been engaged in business as a financial institution or acted as a passive NFFE;

• Is either liquidating or emerging from a reorganization or bankruptcy with the intent to continue or recommence operations as a nonfinancial entity; and

• Has, or will provide, documentary evidence such as a bankruptcy filing or other public documentation that supports its claim if it remains in bankruptcy or liquidation for more than 3 years.

36

Part XXI 501(c) Organization

35 I certify that the entity identified in Part I is a 501(c) organization that:

• Has been issued a determination letter from the IRS that is currently in effect concluding that the payee is a section 501(c) organization that is dated ; or

• Has provided a copy of an opinion from U.S. counsel certifying that the payee is a section 501(c) organization (without regard to whether the payee is a foreign private foundation).

Part XXII Nonprofit Organization

I certify that the entity identified in Part I is a nonprofit organization that meets the following requirements.

- The entity is established and maintained in its country of residence exclusively for religious, charitable, scientific, artistic, cultural or educational purposes;
- The entity is exempt from income tax in its country of residence;
- The entity has no shareholders or members who have a proprietary or beneficial interest in its income or assets;

• Neither the applicable laws of the entity's country of residence nor the entity's formation documents permit any income or assets of the entity to be distributed to, or applied for the benefit of, a private person or noncharitable entity other than pursuant to the conduct of the entity's charitable activities or as payment of reasonable compensation for services rendered or payment representing the fair market value of property which the entity has purchased; and

• The applicable laws of the entity's country of residence or the entity's formation documents require that, upon the entity's liquidation or dissolution, all of its assets be distributed to an entity that is a foreign government, an integral part of a foreign government, a controlled entity of a foreign government, or another organization that is described in this part or escheats to the government of the entity's country of residence or any political subdivision thereof.

Part XXIII Publicly Traded NFFE or NFFE Affiliate of a Publicly Traded Corporation

Check box 37a or 37b, whichever applies.

37a 🗌 I certify that:

• The entity identified in Part I is a foreign corporation that is not a financial institution; and

• The stock of such corporation is regularly traded on one or more established securities markets, including

(name one securities exchange upon which the stock is regularly traded).

b I certify that:

• The entity identified in Part I is a foreign corporation that is not a financial institution;

• The entity identified in Part I is a member of the same expanded affiliated group as an entity the stock of which is regularly traded on an established securities market;

• The name of the entity, the stock of which is regularly traded on an established securities market, is ; and

• The name of the securities market on which the stock is regularly traded is

Part XXIV Excepted Territory NFFE

38 I certify that:

- The entity identified in Part I is an entity that is organized in a possession of the United States;
- The entity identified in Part I:
 - (i) Does not accept deposits in the ordinary course of a banking or similar business;
 - (ii) Does not hold, as a substantial portion of its business, financial assets for the account of others; or
 - (iii) Is not an insurance company (or the holding company of an insurance company) that issues or is obligated to make payments with respect to a financial account; and
- All of the owners of the entity identified in Part I are bona fide residents of the possession in which the NFFE is organized or incorporated.

Part XXV Active NFFE

- **39 I** certify that:
 - The entity identified in Part I is a foreign entity that is not a financial institution;
 - Less than 50% of such entity's gross income for the preceding calendar year is passive income; and

• Less than 50% of the assets held by such entity are assets that produce or are held for the production of passive income (calculated as a weighted average of the percentage of passive assets measured quarterly) (see instructions for the definition of passive income).

Part XXV Passive NFFE

40a I certify that the entity identified in Part I is a foreign entity that is not a financial institution (other than an investment entity organized in a possession of the United States) and is not certifying its status as a publicly traded NFFE (or affiliate), excepted territory NFFE, active NFFE, direct reporting NFFE, or sponsored direct reporting NFFE.

Check box 40b or 40c, whichever applies.

- b 📙 I further certify that the entity identified in Part I has no substantial U.S. owners (or, if applicable, no controlling U.S. persons); or
- c I further certify that the entity identified in Part I has provided the name, address, and TIN of each substantial U.S. owner (or, if applicable, controlling U.S. person) of the NFFE in Part XXIX.

Part XXVII Excepted Inter-Affiliate FFI

41 I certify that the entity identified in Part I:

- Is a member of an expanded affiliated group;
- Does not maintain financial accounts (other than accounts maintained for members of its expanded affiliated group);
- Does not make withholdable payments to any person other than to members of its expanded affiliated group;

• Does not hold an account (other than depository accounts in the country in which the entity is operating to pay for expenses) with or receive payments from any withholding agent other than a member of its expanded affiliated group; and

• Has not agreed to report under Regulations section 1.1471-4(d)(2)(ii)(C) or otherwise act as an agent for chapter 4 purposes on behalf of any financial institution, including a member of its expanded affiliated group.

Part XXVIII Sponsored Direct Reporting NFFE (see instructions for when this is permitted)

42 Name of sponsoring entity:

43 I certify that the entity identified in Part I is a direct reporting NFFE that is sponsored by the entity identified on line 42.

Part XXIX Substantial U.S. Owners of Passive NFFE

As required by Part XXVI, provide the name, address, and TIN of each substantial U.S. owner of the NFFE. Please see the instructions for a definition of substantial U.S. owner. If providing the form to an FFI treated as a reporting Model 1 FFI or reporting Model 2 FFI, an NFFE may also use this part for reporting its controlling U.S. persons under an applicable IGA.

Name	Address	TIN

Part XXX Certification

Under penalties of perjury, I declare that I have examined the information on this form and to the best of my knowledge and belief it is true, correct, and complete. I further certify under penalties of perjury that:

• The entity identified on line 1 of this form is the beneficial owner of all the income to which this form relates, is using this form to certify its status for chapter 4 purposes, or is a merchant submitting this form for purposes of section 6050W;

• The entity identified on line 1 of this form is not a U.S. person;

• The income to which this form relates is: (a) not effectively connected with the conduct of a trade or business in the United States, (b) effectively connected but is not subject to tax under an income tax treaty, or (c) the partner's share of a partnership's effectively connected income; and

• For broker transactions or barter exchanges, the beneficial owner is an exempt foreign person as defined in the instructions.

Furthermore, I authorize this form to be provided to any withholding agent that has control, receipt, or custody of the income of which the entity on line 1 is the beneficial owner or any withholding agent that can disburse or make payments of the income of which the entity on line 1 is the beneficial owner.

I agree that I will submit a new form within 30 days if any certification on this form becomes incorrect.

Sign Here

Signature of individual authorized to sign for beneficial owner

Print Name

Date (MM-DD-YYYY)

I certify that I have the capacity to sign for the entity identified on line 1 of this form.

Certification Regarding Beneficial Owners of Legal Entity Customers

For Office Use Only:	FA	Account Number:	New Account	Update to Existing Account*
* Please indicate informat	tion being up	odated:		

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, 25 percent or more of the equity interests of the legal entity customer (e.g. each natural person that owns 25 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 CEO, CFO, COO, 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 five individuals (i.e., one individual under section (ii) and four 25 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)

Persons opening an account on behalf of a legal entity must provide the following information:

a. Name and Title of Natural Person Opening Account:

b. Name, Type, and Address of Legal Entity for Which the Account is Being Opened:



c. The following information for each individual, if any, who, directly or indirectly, through any contract, arrangement, understanding, relationship or otherwise, owns 25 percent or more of the equity interests of the legal entity listed above. If no individual meets this definition, please check "Beneficial Owner Not Applicable" below and skip this section.

Beneficial Owner Not Applicable

-For a person with a SSN, provide the SSN and leave Primary ID Type, Primary ID State/Country, and Primary ID Number blank.

-For a non-U.S. person without a SSN, provide a passport number and country of issuance. In lieu of a passport, non-U.S. persons may also provide a U.S. government-issued alien identification card number, or other foreign government-issued document evidencing nationality and bearing a photograph or similar safeguard.

Beneficial Owner 1 Information:		% of ownership (rounded to the nearest whole number)					
Individual Name		Residential Street Address (Cannot be a P.O. Box)					
Date of Birth	f Birth Social Security Number		Address Line 2				
Primary ID Type	Primary I	D State/Country	City			Zip Code	
Primary ID Number			Country	Country			
Beneficial Owner 2 Information:		% of ownership (ro	ounded to the neare	est whole number)			
Individual Name			Residential St	reet Address (Canno	ot be a P.C	. Box)	
Date of Birth	Social Se	curity Number	Address Line	2			
Primary ID Type	Primary I	D State/Country	City	State		Zip Code	
Primary ID Number		Country					
Beneficial Owner 3 Information:		% of ownership (ro	ounded to the neare	est whole number)			
Individual Name		Residential St	reet Address (Canno	ot be a P.C	. Box)		
Date of Birth	f Birth Social Security Number			2			
Primary ID Type	Primary I	D State/Country	City	State		Zip Code	
Primary ID Number		Country					
Beneficial Owner 4 Information:		% of ownership (ro	ounded to the neare	est whole number)			
Individual Name		Residential Street Address (Cannot be a P.O. Box)					
Date of Birth Social Security Number		Address Line 2					
Primary ID Type	Primary ID State/Country		City	State		Zip Code	
Primary ID Number		Country	Country				



d. The following information for one individual with significant responsibility for managing the legal entity above, such as: (i) an executive officer or senior manager (e.g. CEO, CFO, COO, managing member, general partner, president, vice president treasurer); or (ii) 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)).

Individual with Control Information

Individual Name	Residential Street Address (Cannot be a P.O. Box)				
Date of Birth Social Security Number (SSN)		Address Line 2			
Primary ID Type	Primary ID State/Country	City	State	Zip Code	
Primary ID Number	Country				

Certification

I, ______ (name of natural person opening account), hereby certify, to the best of my knowledge, that the above information provided above is complete and correct.

Signature:	Signatu	re:
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Date:





FOREIGN FINANCIAL INSTITUTION QUESTIONNAIRE

Are you a member of a securities exchange, other organized securities markets, or	
a clearinghouse for securities in jurisdictions in which it operates?	
If yes, name of the exchange or licensing authority:	[]No []Yes
Do you underwrites securities or otherwise help bring new issues to market?	[]No []Yes
Act as a market maker on an exchange, trading system, or otherwise hold itself out as promoting liquidity to market professionals or the public?	
	[]No []Yes
Provide services to investors, such as handling money and securities, extending credit, lending securities, or giving investment advice?	[]No []Yes
Advertise or otherwise lets others know that you are in the business of buying and selling securities?	[]No []Yes
Are the funds that will be deposited in the account opened at Lightspeed those of	
the entity or its customers?	[] Funds of Entity []Customer Funds
If Customer funds, do you have an Anti Money Laundering program to screen clients?	[]No []Yes
For Futures Customers Only:	[]Not Applicable
Do you solicit or accept orders to purchase or sell futures or commodity option contracts in the jurisdictions in which the entity operates?	[]No []Yes
Accept any money, securities, or other property to margin, guarantee, or secure solicited or accepted trades or contracts?	[]No []Yes
For offshore funds only:	[]Not Applicable
a. Are shares continuously offered?	[]No []Yes
b. Are there more than 100 beneficial shareholders?	[]No []Yes
c. Are shares offered to the general public in the funds home jurisdiction, or whether they are offered exclusively to purchasers who qualify under certain minimum asset, or are there any sophistication requirements?	
If yes, please provide copy of offering documents.	[]No []Yes

Customer Signature

Date



20 Headquarters Plaza, North Tower, 7th Floor, Morristown, NJ 07960

This Package contains the following information:

Customer Identification Program Business Continuity & Disaster Recovery Plan Summary Trading Agreement Day-Trading Risk Disclosure Day-Trading Margin Disclosure Extended Hours Risk Disclosure Margin Disclosure Form CRS Privacy Policy Fee Disclosure

CUSTOMER IDENTIFICATION PROGRAM

Important Information You Need to Know About Opening A New Account

To help the government fight the funding of terrorism and money laundering activities, federal law requires financial institutions to obtain, verify and record information that identifies each person who opens an account. This Notice answers some questions about the Lightspeed Financial Services Group LLC's Customer Identification Program.

What types of information will you need to provide?

When you open an account, Lightspeed Financial Services Group (Lightspeed) is required to collect information such as the following from you:

- Your Name
- Date of Birth
- Address

• Identification Number: US Citizens will be asked to provide a taxpayer identification number (social security number or employer identification number, etc.). Non-US Citizens will be asked to provide a taxpayer identification number, passport number and country of issuance, alien identification card number, or government-issued identification showing nationality, residence and a photograph of you.

You may also need to show your driver's license or other identifying documents.

A corporation, partnership, trust or other legal entity may need to provide other information, such as its principal place of business, local office, employer identification number, certified articles of incorporation, government-issued business license, a partnership agreement, or a trust agreement.

US Department of the Treasury, Securities and Exchange Commission, FINRA, New York Stock Exchange, and other exchange rules already require you to provide most of this information. These rules may also require you to provide additional information, such as your net worth, annual income, occupation, employment information, investment experience and objectives, and risk tolerance.

What happens if you don't provide the information requested or your identity cannot be verified?

Lightspeed may not be able to open an account or carry out transactions for you. If Lightspeed has already opened an account for you, it may have to be closed.

We thank you for your patience and hope that you will support the financial industry's efforts to deny terrorists and money launderers access to America's financial system.

BUSINESS CONTINUITY AND DISASTER RECOVERY PLAN SUMMARY

Overview

Lightspeed Financial Services Group LLC ("Lightspeed") has developed a Disaster Recovery and Business Continuity Plan ("Plan") in the event that a function deemed critical to Lightspeed 's ongoing business operations fails. The plan will assist Lightspeed in minimizing business operational issues that result from unexpected events or disasters.

Lightspeed 's policy is to respond to a Significant Business Disruption (SBD) by safeguarding employees' lives and Company property, making a financial and operational assessment, quickly recovering and resuming operations, protecting all of the firm's books and records, and allowing customers to transact business. In the event that the Company determines it is unable to continue business, Lightspeed will assure customers prompt access to their funds and securities.

Lightspeed 's plan anticipates two kinds of SBDs, internal and external. Internal SBDs affect only Lightspeed 's ability

to communicate and do business, such as a failure of a critical system, or a fire in the Lightspeed offices. External SBDs prevent the operation of the securities markets or a number of firms, such as a terrorist attack, a city flood, or a wide-scale, regional disruption.

In the event of an SBD, Lightspeed intends to continue its operations to the extent reasonable and practical under the circumstances and will place utmost priority in re-establishing the data and operational systems necessary to provide our customers with prompt access to their funds and securities, and with the ability to close out open positions. We will continue to take orders through any of the methods that are available and reliable, and in addition, as communications permit, we will inform our customers what alternatives they have to send their orders to us.

Lightspeed does not maintain custody of customers' funds or securities, which are maintained by the clearing firm carrying your account. In the unlikely event that we determine we are unable to continue our business as a result of an SBD, we will assure customers whom we have introduced to our clearing firm have prompt access to their funds and securities through the clearing firm.

An overview of the Plans of our clearing brokers can be found online:

• Wedbush Securities, Inc. http://www.wedbush.com/RegulatoryDisclosures

• Interactive Brokers LLC https://www.interactivebrokers.com/en/index.php?f=legalDocs&p=disclosures

Lightspeed 's Plan foresees three general classes of business disruptions:

1. Significant but not catastrophic disruption at Lightspeed 's main office.

2. Catastrophic disruption at Lightspeed 's main office.

3. City-wide, regional or other disruption that temporarily limits access to and/or the functioning of the Lightspeed main office and data center ("Office").

Disclaimers

There are innumerable potential causes of a business disruption, and the events that cause them may vary significantly in nature, size, scope, severity, duration and geographic location, and will result in distinct degrees of harm to human life; firm assets; the banks, exchanges, securities firms and ECNs with which the firm conducts business; and local, regional and national systems infrastructure (e.g., telecommunications, Internet connectivity, power generation and transportation) that could affect Lightspeed 's recovery in a variety of ways. Lightspeed reserves the right to flexibly respond to business disruptions in a situation-specific manner which the Company deems appropriate.

Lightspeed may modify its Disaster Recovery and Business Continuity Plan at any time. The Company will post updates to this disclosure on its website.

Trading Agreement

This Trading Agreement contains important information. Please read this information carefully and retain a copy for future reference. In consideration for Lightspeed Financial Services Group LLC ("Lightspeed" or the "Firm") opening and maintaining one or more Accounts for me, I agree to the terms and conditions set forth in this Customer Agreement ("Agreement"), as may be amended from time to time.

INTRODUCTION

I promise to read this Agreement carefully and retain it for future reference. I understand that the terms and conditions of this Agreement govern all aspects of my relationship with Lightspeed, including all transactions between Lightspeed and me and all products and services now or in the future offered through Lightspeed, beginning on the date my Account is opened.

BROKERAGE SERVICES

I ACKNOWLEDGE THAT I ALONE AM RESPONSIBLE FOR DETERMINING THE SUITABILITY OF MY INVESTMENT CHOICES IN LIGHT OF MY PARTICULAR CIRCUMSTANCES. I UNDERSTAND THAT LIGHTSPEED ASSUMES NO RESPONSIBILITY FOR SUCH DETERMINATION. As a self-directed investor, I assume full responsibility for each and every transaction in or for my Account and for my own investment strategies and decisions. I understand and agree that Lightspeed and its affiliates, and their officers, directors, employees and agents will have no liability whatsoever for the results of my investment strategies, transactions and decisions.

No Advice or Recommendations

Lightspeed does not and will not provide me with any legal, tax, estate planning or accounting advice or advice regarding the suitability, profitability or appropriateness for me of any security, investment, financial product, investment strategy or other matter. I acknowledge that none of the information that may be provided by Lightspeed in connection with the Account is intended as tax or legal advice. Although Lightspeed may provide access to information about how to invest and what to buy, no third-party recommendations are developed or endorsed by Lightspeed, and any information in materials prepared by Lightspeed is not to be construed as a recommendation or advice designed to meet the particular objectives or situation of any investor.

I acknowledge that Lightspeed employees are not authorized to give any such advice, and I will neither solicit nor rely on any investment advice from any Lightspeed employee. No Lightspeed employee will recommend the account type that I have applied for and I have selected such on my own determination based on my particular circumstances. Any information provided through the Service will not be used or considered by me as a recommendation that I buy, sell or hold a particular security or pursue any particular investment strategy. I also acknowledge that Lightspeed neither assumes responsibility for nor guarantees the accuracy, currency, completeness or usefulness of information, commentary, recommendations, advice, investment ideas or other materials that may be accessed by me through the Service. This includes bulletin boards, message boards, chat services or other online conference or telecast by third party providers through Lightspeed . If I choose to rely on such information, I do so solely at my own risk. I understand that the research, analysis, news or other information made available through the Service is not personalized or in any way tailored to reflect my personal financial circumstances or investment objectives and the securities and investment strategies discussed may not be suitable for me. Such information is not an offer, or a solicitation of an offer, to buy or sell securities on behalf of Lightspeed .

I acknowledge that orders I place may be sent directly to a market center without being viewed by an individual Lightspeed representative. I agree to accept full responsibility for all orders I place and to release Lightspeed and its affiliates, and their officers, directors, employees and agents from any liability for executing the orders I place in connection with the Account. I acknowledge that all orders are at my sole risk.

Order Handling and Execution

In handling any order that I submit, I acknowledge and accept that Lightspeed may first route such order on a not held basis to a Lightspeed -selected execution venue or broker-dealer, and if such order is not fully or partially executed, then direct the whole or remainder of such order, based on my selection, to one of various market centers, exchanges, or an electronic communications network, with which Lightspeed maintains a relationship. In other words, if you select a market center from the drop-down menu, hot key, or hot button on your trading platform, Lightspeed may first route such order to an alternative market center. There is no guarantee that any order will be accepted or processed by any particular broker-dealer or market center that matches orders for execution, and Lightspeed resions the right to change its processes and procedures pertaining to order execution, and the entities with which it maintains relationships for these purposes, without prior notice to me. Lightspeed routing fees will be assessed based upon the trading venue selected in the instructions of the order. We reserve the right to charge routing fees whether or not executions are received on the trading venue selected. In the course of routing your orders Lightspeed may receive reduced or no execution costs and/or payment for order flow which could differ from those applied to your trade per the published fee schedule on the Lightspeed website. The reduced costs are not passed on to clients.

Restrictions on Account Services

Lightspeed may place trading, disbursement, service or other restrictions on my Account for various reasons, including court order, tax levy or garnishment, request of a government agency or law enforcement authority, a Debit Balance, margin deficiency or firm risk policy violation in my Account, or in the event of a dispute between joint Account holders. I understand that Lightspeed may be required to liquidate or close out Securities

and/or Other Property in my Account to satisfy any such court order, garnishment, tax levy, firm risk policy violation or other legal obligation. Lightspeed will not be held liable for any Losses that arise out of or relate to any such transaction and I agree to indemnify and hold Lightspeed and its affiliates and their officers, directors, employees and agents harmless from and against any Losses that I may incur in their taking such actions.

Closing Your Account

Lightspeed can close your account, or terminate any feature, at any time, for any reason, and without prior notice. You can close your account by notifying us in writing or calling us. We may automatically close accounts with zero balances.

Regardless of how or when your account is closed, you will remain responsible for all charges, debit items, or other transactions you initiated or authorized, whether arising before or after termination. Note that a final disbursement of assets may be delayed until remaining issues have been resolved.

Dividends, Interest and Subscription Rights

Lightspeed or Clearing Broker will receive periodic payments, such as dividends and interests, on my behalf, and will credit my Account on or shortly after the payable dates. Foreign dividends and interest will be credited to my Account on or shortly after the funds are converted to U.S. currency.

Impartial Lottery Allocation System

When Lightspeed or Clearing Broker holds on my behalf, bonds or preferred stocks in street or bearer form which are callable, I agree to participate in an impartial lottery allocation system. I also understand that when the call is favorable, no allocation will be made to any account in which Lightspeed or Clearing Broker, its affiliates, directors, officers or employees, have a financial interest until all other customer positions in such securities are satisfied on an impartial lottery basis.

TRADING SYSTEM AND USE OF ELECTRONIC SERVICES

I understand that Lightspeed does not guarantee that all or any of the access routes will be available to me all the time. Lightspeed reserves the right to suspend access to the Service without prior notice during scheduled or unscheduled system repairs or upgrades.

Customer Responsibility

I understand that I am responsible for all acts and omissions relating to the use of the Service, including all orders entered through the Service using my User ID and Passwords. I agree that it is my responsibility to maintain the confidentiality of my User ID and Passwords and to change my Passwords regularly and to keep them confidential. I agree to notify Lightspeed immediately if: (i) an order is placed through the Service and I do not receive an order number; (ii) an order is placed through the Service and I do not receive an accurate acknowledgment of the order or of its execution; (iii) I receive acknowledgment of an execution of an order which I believe I did not place; (iv) any inaccurate or conflicting report concerning your account balances, securities positions or transaction history; or (v) I become aware of any unauthorized use of my User ID or Passwords.

If I fail to notify Lightspeed as soon as practicable when any of the above conditions occur, neither Lightspeed nor any of its affiliates will be liable to me or to any other person for any claim with respect to the handling, mishandling or loss of any order.

Market Data

I understand that neither Lightspeed nor any participating Data Provider guarantees or makes any warranty of any kind, expressed or implied, regarding the timeliness, sequence, accuracy or completeness of Market Data. I agree that Lightspeed is not liable for any Losses (including lost opportunity or profits) arising out of or relating to: (i) any inaccuracy, defect or omission of the data; (ii) any error or delay in the transmission of such data; or (iii) interruption in any such data due to any cause beyond the control of Lightspeed.

I also understand that each participating national securities exchange or association asserts a proprietary interest in all of the Market Data it furnishes to the parties that disseminate the data. I will use Market Data (including Real Time Quotes) only for my individual non-business use. I will not provide Market Data to any person or entity. I understand that the Data Providers may enforce the terms of this Agreement directly against me.

Electronic Services

"Electronic Services" ("the Service") means any and all of Lightspeed 's computer, electronic or telephonic services or systems, including, but not limited to, services and information accessible and provided by Lightspeed through third parties, externally accessible computers and networks, any Web site maintained by Lightspeed, and any other computer, electronic or telephonic securities trading services or information system provided to customers whether established directly by Lightspeed or through other service providers.

I agree that Electronic Services are provided to me on an "AS IS" and "AS AVAILABLE" basis. I further agree that Lightspeed and its affiliates, and their officers, directors, partners, employees and agents will have no liability, whether direct or indirect, consequential, punitive or exemplary, to me or to third parties, and no responsibility whatsoever for:

1. any losses resulting from the correctness, quality, accuracy, timeliness, sequence, pricing, reliability, performance, continued availability, completeness or delays, omissions or interruptions in the delivery of Electronic Services or for any other aspect of the performance of the Electronic Services or for any failure or delay in the execution of any transactions through the use of the Electronic Services;

- 2. any losses resulting from the failure of any connection or communication service to provide or maintain my access to the Electronic Services, regardless of whether the connection or communication service is provided by Lightspeed, its affiliates, their officers, directors, partners, employees or agents or a third-party provider; and
- 3. any losses resulting from interruption, delay or disruption of such access or any erroneous communication between Lightspeed, its affiliates, their officers, directors, partners, employees or agents on the one hand and me on the other hand; even if Lightspeed, its affiliates, their officers, directors, partners, employees or agents have been advised of such losses.

E-Mail

Because of inherent limitations on Internet e-mail (such as reliability of delivery, timeliness and security), I agree that I will not use e-mail in any manner not specifically authorized by Lightspeed to request, authorize or effect the purchase or sale of any Securities and/or Other Property, to send fund transfers instructions, or for any other financial transactions that require real-time communication or more formal written authorization in accordance with applicable law or Lightspeed policies. Any such request, order or instruction that I send in contravention of the foregoing may not be accepted and may not be processed by Lightspeed. Lightspeed will not be responsible for any loss or damage that could result from my requests, orders or instructions not being accepted or processed as described above. In addition, please be advised that due to security risks any personal or identifying information, such as account numbers, credit or debit card numbers, Social Security numbers or Passwords, should not be sent via Internet e-mail.

OPTION AGREEMENT

I release and agree to indemnify and hold Lightspeed and its affiliates, and their officers, directors, employees and agents harmless from and against any Losses arising out of or relating to any action taken pursuant to the Option Account terms of this Agreement.

Random Allocation Disclosure

I understand that exercise assignment notices for option contracts are allocated among customer short option positions in accordance with a random allocation method and agree to be bound by the allocation method of the clearing firm. A more detailed description of the random allocation method is available on request.

MODIFICATION OF AGREEMENT OR SERVICE

I understand that Lightspeed may change any of the terms and conditions of this Agreement and/or eliminate any term or condition anytime. Lightspeed reserves the right, but does not intend to follow it as a matter of course, to notify me of modifications to the Agreement by mailing or e-mailing a written notice or new Agreement to me. I understand that the normal method of notifying me of modifications to the Agreement will be to post the information on the Lightspeed Web site. I also agree that Lightspeed may change its Service anytime and that it is not obligated to provide me with notice of such a change.

DISCLOSURE STATEMENTS

DAY-TRADING RISK DISCLOSURE

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. Watch out for "hot tips" and "expert advice" from newsletters and websites catering to day traders

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 system 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 commissions 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 the 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.

DAY TRADING MARGIN DISCLOSURE

Definition of a "Pattern Day Trader"

"Pattern day traders" are defined as those customers who day trade four or more times in five business days. If day trading activities do not exceed six percent of the customer's total trading activity for the five-day period, the clearing firm is not required to designate such accounts as pattern day traders. The six percent threshold is designed to allow clearing firms to exclude from the definition of pattern day trader those customers whose day trading activities comprise a small percentage of their overall trading activities.

In addition, the rule requires a firm that knows, or has a reasonable basis to believe, that the customer is a pattern day trader to designate such customer as a pattern day trader immediately, instead of delaying such determination for five business days.

Minimum Equity Requirement

The rule requires that a pattern day trader have deposited in his or her account minimum equity of \$25,000 on any day in which the customer day trades. The required minimum equity must be in the account prior to any day trading activities. If the customer meets the pattern day trading criteria and does not have the minimum equity in his or her account, the firm will issue an equity deficiency call. This call is separate and distinct from the day trading margin call.

Day Trading Buying Power

Day trading buying power is four times the day trader's maintenance margin excess. This calculation is based on the equity in the customer's account at the close of business the previous day, less any maintenance margin requirement, multiplied by four for equity securities. For most stocks the buying power will be reduced by the notional value of the trade, however some stocks may require a higher buying power based on the risk and volatility of the stock, which can be set by Lightspeed and/or the clearing firm at their discretion.

Day Trading Margin Calls

In the event a day trading customer exceeds his or her trading buying power, firms are required to issue a day trading margin call to pattern day traders that exceed their day trading buying power. Customers have five business days to

deposit funds to meet this day trading margin call. The day trading account is restricted to day trading power of two times maintenance margin excess, beginning on the trading day after the day trading buying power is exceeded until the earlier of when the call is met or five business days. If the day trading margin call is not met by the fifth business day, the account must be further restricted to trading only on a cash basis for 90 days or until the call is met.

Two Day Holding Period Requirement

The rule requires that funds used to meet the day trading minimum equity requirement or to meet a day trading margin call must remain in the customer's account for two business days.

Prohibitions of the Use of Cross Guarantees

Under the amendments, pattern day traders are not permitted to meet day trading margin requirements through the use of cross guarantees. Each day trading account is required to meet the applicable requirements independently, using only the financial resources available in the account. Accordingly, pattern day traders are prohibited from using cross guarantees to minimum equity requirements or to meet day trading margin calls.

EXTENDED HOURS RISK DISCLOSURE STATEMENT

You should consider the following points before engaging in trading outside of regular market hours.

Risk of Lower Liquidity. Liquidity refers to the ability of market participants to buy and sell securities. Generally, the more orders that are available in a market, the greater the liquidity. Liquidity is important because with greater liquidity it is easier for investors to buy or sell securities, and as a result investors are more likely to pay or receive a competitive price for securities purchased or sold. There may be lower liquidity in extended hours trading as compared to regular market hours. As a result, your order may only be partially executed, or not at all.

Risk of Higher Volatility. Volatility refers to the changes in price that securities undergo when trading. Generally, the higher the volatility of a security the greater its price swings. There may be greater volatility in extended hours trading in extended hours trading than in regular market hours. As a result, your order may only be partially executed, or not at all, or you may receive an inferior price in extended hours trading than you would during regular market hours.

Risk of Changing Prices. The prices of securities traded in extended hours trading may not reflect the prices either at the end of regular market hours or upon the opening the next morning. As a result, you may receive an inferior price in extended hours trading than you would during regular market hours.

Risk of Unlinked Markets. Depending on the extended hours trading system or the time of day, the prices displayed on a particular extended hours trading system may not reflect the prices in other concurrently operating extended hours trading systems dealing in the same securities. Accordingly, you may receive an inferior price in one extended hours trading system than you would in another extended hours trading system.

Risk of News Announcements. Normally, issuers make news announcements that may affect the price of their securities after regular market hours. Similarly, important financial information is frequently announced outside of regular market hours. In extended hours trading, these announcements may occur during trading, and if combined with lower liquidity and higher volatility, may cause an exaggerated and unsustainable effect on the price of a security.

Risk of Wider Spreads. The spread refers to the difference in price between what you can buy a security for and what you can sell it for. Lower liquidity and higher volatility in extended hours trading may result in wider than normal spreads for a particular security.

Risk of Lack of Calculation or Dissemination of Underlying Index Value or Intraday Indicative Value ("IIV"). For certain derivative securities products, an updated underlying index value or IIV may not be calculated or publicly disseminated in extended trading hours. Since the underlying index value and IIV are not calculated or widely disseminated during extended hours trading sessions, an investor who is unable to calculate implied values for certain derivative securities products in those sessions may be at a disadvantage to market professionals.

RISKS ASSOCIATED WITH THE USE OF STOP ORDERS

Stop prices are not guaranteed execution prices. A "stop order" becomes a "market order" when the "stop price" is reached and firms are required to execute a market order fully and promptly at the current market price. Therefore, the price at which a stop order ultimately is executed may be very different from the entered "stop price." Accordingly, while you may receive a prompt execution of a stop order that becomes a market order, during volatile market conditions, the execution may be at a significantly different price from the stop price if the market is moving rapidly.

Stop orders may be triggered by a short-lived, dramatic price change. During periods of volatile market conditions, the price of a stock can move significantly in a short period of time and trigger an execution of a stop order (and the stock may later resume trading at its prior price level). It is important to understand that if your stop order is triggered under these circumstances, you may sell at an undesirable price even though the price of the stock may stabilize during the same trading day.

Sell stop orders may exacerbate price declines during times of extreme volatility. The activation of sell stop orders may add downward price pressure on a security. If triggered during a precipitous price decline, a sell stop order also is more likely to result in an execution, well below the stop price.

Placing a "limit price" on a stop order may help manage some of these risks. A stop order with a "limit price" (a "stop limit" order) becomes a "limit order" when the stock reaches the "stop price." A "limit order" is an order to buy or sell a security for an amount no worse than a specific price (i.e., the "limit price"). By using a stop limit order instead of a regular stop order, you may receive additional certainty with respect to the price the you receive for the stock. However, you should be aware that, because brokers cannot sell for a price that is lower (or buy for a price that is higher) than the limit price selected, there is the possibility that the order will

not be executed at all. Lightspeed encourages the use of limit orders in cases where you prioritize achieving a desired target price more than getting an immediate execution irrespective of price.

MARGIN DISCLOSURE STATEMENT

In some cases, Lightspeed has arranged for you to open a margin account with our clearing firm. If you opened your account under such an arrangement Lightspeed is 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 brokerage firm. Consult your firm regarding any questions or concerns you may have with your margin accounts.

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

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

- You can lose more funds than you deposit in the margin account. A decline in the value of securities that are purchased or an increase in the value of securities that you have sold short on margin may require you to provide additional funds to the firm that has made the loan to avoid the forced liquidation or close out of those securities or other securities in your account.
- **The firm can force the liquidation or close out 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 liquidate or close out 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 liquidating or closing out the securities positions 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.

(Firm refers to either the clearing firm or Lightspeed Financial Services Group LLC)

LIQUIDATION:

In the event that (a) Customer shall fail to timely deposit or maintain or to make payment of margin or any other amount hereunder; (b) Customer (if an individual) shall die or be judicially declared incompetent or (if an entity) shall be dissolved or otherwise terminated; (c) a proceeding under the Bankruptcy Act, an assignment for the benefit of creditors, or an application for a receiver, custodian, or trustee shall be filed or applied for by or against Customer; (d) an attachment is levied against Customer's account; (e) the property deposited as collateral is determined by Lightspeed in its sole discretion, regardless of current market quotation, to be inadequate to properly secure the account; or (f) at any time Lightspeed deems it necessary for its protection for any reason whatsoever, Lightspeed may, in the manner it deems appropriate in order to prevent or minimize loss, close out Customer's open positions in whole or in part, sell any or all of Customer's property held in the Customer's account, including but not limited to exchange memberships, buy any securities, futures contracts, options or other property for Customer's account, and cancel any outstanding orders and commitments made by Lightspeed on behalf of Customer. Such sale, purchase or cancellation may be made at Lightspeed's discretion without advertising the same and without notice to Customer or Customer's personal representatives and without prior tender, demand for margin or payment, or call of any kind upon Customer. Lightspeed may purchase the whole or any part thereof free from any right of redemption. It is understood that a prior demand or call or prior notice of the time and place of such sale or purchase shall not be considered a waiver of Lightspeed's right to sell or buy without demand or notice as herein provided. Customer shall remain liable for and shall pay to Lightspeed through its Clearing Firm immediately the amount of any deficiency in any account of Customer with Lightspeed resulting from any transaction described above. Outstanding margin calls can be met through Liquidation by Lightspeed at any time without notice to the Customer. Risk Liquidations can also be made by Lightspeed at any time if it feels the Customer account is in danger of incurring a negative equity balance or a violation of Lightspeed's Risk Policy without any advance notice to the Customer. Lightspeed will make a good faith attempt to contact the Customer but this sometimes does not occur. This liquidation policy applies to all types of accounts introduced by Lightspeed to a Clearing Firm including Equities/Options and Futures accounts.

Lightspeed Financial Services Group LLC

Form CRS Customer Relationship Summary August 31, 2020

	Form CRS Customer Relationship Summary August 31, 2020		
Introduction	Lightspeed Financial Services Group LLC (Lightspeed) 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 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 adviser, and investing.		
What investment services and advice can you provide me?	We offer retail investors the ability to open self directed brokerage accounts to buy and sell securities. Lightspeed will not provide any recommendations to its clients and will monitor accounts only in respect to its regulatory obligations as a broker dealer. We will not perform any investment monitoring since Lightspeed is not making any recommendations.		
	New accounts are subject to the following minimum funding requirements		
	 \$25,000 – if using the Lightspeed Trader, EZE EMS, Sterling Trader or Livevol X platforms \$10,000 – if using the Web Trader platform \$175,000 – Portfolio Margin account \$110,000 – Portfolio Margin account using Livevol X platform For additional information, please refer to		
	https://www.lightspeed.com/brokerage-services/trading-accounts/funding-information/		
	Conversation Starter. Ask your financial professional— What is your relevant experience, including your licenses, education and other qualifications? What do these qualifications mean?		
What fees will I pay?	Retail investors that open accounts will incur a commission charge that are either priced at a per share rate or a per trade rate. The more trades that are executed in your account will result in more commission charges. It is the retail investors decision to trade as they desire pursuant to their circumstances. A minimum commission charge will be applied to any order of less than 100 shares on the Lightspeed Trader and Sterling Trader platforms. Eze EMS platform will incur a minimum commission charge of \$3. Lightspeed Web has a minimum commission of \$4.50 for options orders. In addition, if your account has a per share commission set up, your trades will also be subject to routing fees based on the market destination that you select. See <u>https://www.lightspeed.com/pricing/routing-fees/</u> for details. The Web platform does not charge any routing fees. Certain platforms are charged monthly platform fees and market data fees. See <u>https://www.lightspeed.com/platform-comparison/</u> for details. Accounts that fall below \$15,000 will be charged a \$25 monthly minimum commission fee, minus any actual commissions charged in the prior month.		
	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.		
	For additional information, please see <u>https://www.lightspeed.com/pricing/routing-fees/</u> (Routing Fees) <u>https://www.lightspeed.com/platform-comparison/</u> (Platform and Market Data fees)		
	Conversation Starter. Ask your financial professional— ☐ Help me understand how these fees and costs might affect my investments.		

What are your Legal obligations to me when providing a recommendation?	Lightspeed Financial Professionals do not make recommendations to you. We offer you the tools to direct your brokerage account and enter transactions as you see fit based on your objectives and financial circumstances.
How does the 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. For example, all accounts that fall below \$15,000 equity balance will be charged a \$25 monthly minimum commission fee, minus any actual commissions charged in the prior month. Lightspeed primarily makes money through the generation of transaction-based commissions. If you are a buy and hold investor, you will be charged the monthly minimum commission fee in months where there is no trading activity in the account. Here are some examples to help you understand what this means:
	 An account has a month end equity balance of \$10k and generates commissions totaling \$10 for the month. The account will be charged a monthly minimum commission fee of \$15 (\$25 minus \$10 actual commissions). An account has a month end equity balance of \$14k and does not have any trades for the month resulting in no commission charges being generated. The account will be charged a \$25 monthly minimum commission fee. Conversation Starter. Ask your financial professional—
	How might your conflicts of interest affect me, and how will you address them? For additional information, please see <u>https://www.lightspeed.com/pricing/commission/</u> .
How do your financial professionals make money?	Lightspeed 's financial professionals are compensated primarily on a base salary. A small number may receive a portion of the commissions generated on certain accounts in addition to their salary. The majority of our accounts do not have an assigned financial professional to the account thus no individual will receive part of the commissions.
Do your	Yes
financial professionals have a	Visit Investor.gov/CRS for a free and simple search tool to research us and our financial professionals.
legal or disciplinary history?	Conversation Starter. Ask your financial professional— As a financial professional, do you have any disciplinary history? For what type of conduct?
Additional Information	For additional information about our services, please visit our web site at <u>https://www.lightspeed.com/</u> . If you would like additional, up-to-date information or a copy of this disclosure, please call 1-888-577-3123
	Conversation Starter. Ask your financial professional— 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?

PRIVACY POLICY DISCLOSURE

Overview

Lightspeed Financial Services Group LLC ("**Lightspeed**," "we" or "us") is committed to respecting and protecting your privacy. This privacy policy applies to Lightspeed 's websites and other applications listed here, <u>https://www.lightspeed.com/</u> and <u>https://www.lightspeedinstitutional.com</u>,(the "**Sites**"). This policy describes the personal information we collect and how that personal information may be used, maintained and, in some cases, shared.

"**Personal information**" includes any information that enables us to identify you, directly or indirectly, by reference to any identifiers such as name, identification number, location data, online identifier, occupation, income and other background and/or credit related information among other information or one or more factors specific to you.

Lightspeed is the "**controller**" and is responsible for deciding how personal information is used. We are a limited liability company organized under the laws of the State of Delaware, U.S.A., with an office at

20 Headquarters Plaza, North Tower, 7th Floor, Morristown, NJ 07960 USA

By using or accessing the Sites, or by providing personal information to us on or through the Sites, you acknowledge that you have read and understood the policies and procedures described in this privacy policy.

If you have any questions or concerns about this privacy policy, please contact us using the information on the <u>Contact</u> <u>Us</u> page.

Please read our privacy policy to understand:

How We Use Your Personal Information

Personal Information You Provide to Us
 Site Use Information
 Cookie Policy
 ***Do Not Track" Browser Settings Opting Out of Communications Disclosing Information to Third Parties** Security
 Retention
 Links to Other Websites
 Access from Outside the United States
 Your California Privacy Rights
 Your European Privacy Rights
 Governing Law
 Changes to this Privacy Policy
 Contact

How We Use Your Personal Information

We use your personal information as described in this policy primarily to provide services that you have requested or to perform our responsibilities under any agreement with you. We also use your personal information in dealing with third party agents who act on our and your behalf (such as firms providing clearing and custody services), to comply with applicable laws and regulations (which may include requests for information from applicable regulatory and governmental authorities) and to provide other information we think may be of interest to you.

Should you wish to limit the use of your personal information you should <u>contact us</u> so that we may determine how to do that while continuing to provide you the services you expect. We note that should you wish to limit the use of your personal information for purposes of servicing your business with us, we may not be able to continue to provide you services. In all cases, we will retain your personal information and use same as required by applicable law and

regulations (which may include requests for information from applicable regulatory and governmental authorities) even if you request that we not do so.

The situations in which we will process your personal information are listed below:

Personal Information You Provide to Us

This is information that you choose to provide to us, which may include without limitation: your name, job title, company name, contact information including email, postal address and telephone number(s), social security number, occupation, income and information from consumer and/or credit reporting agencies among other background and other relevant information.

You may or will, as applicable, provide your personal information in the following circumstances:

Using our services

Our provision of services to you as well as our third-party providers (e.g., clearing and custody providers) require use of your personal information. We also use your personal information in order to monitor and analyze our business and operations including, without limitation, to comply with applicable legal and regulatory requirements and in connection with investigations and litigation.

Subscribing to marketing services, news, alerts or other publications

You can use the Sites to subscribe to Lightspeed or third-party marketing services, news, data, alerts or other publications. We may ask you to provide personal information such, without limitation, as your name, contact details and topics of interest. We will use this information to provide you with the content you have requested and to tailor this content to your preferences and areas of interest as well as to provide information required by certain third-party providers of services such, without limitation, providers of data.

We may use your personal information to communicate with you about other topics that we believe may be of interest unless you withdraw your consent. You can unsubscribe from this content at any time (please see the "Opting-out of Communications" section below).

Blogs

In some cases, our Sites allow you to comment on Lightspeed blog posts and to share content with third parties via email or social media. Personal information may be shared in any comment and you may submit your name or email address with the comment. By sharing content on social media, you will provide Social Networks with information about your use of our Sites.

You can use our Sites to subscribe to an RSS feed or to receive email updates of our blogs by submitting your name and email address. We use this information to send you the content you request and to communicate with you in connection with our blogs. You can unsubscribe from this content at any time (please see the "Opting-out of Communications" section below).]

Events or webinars

You may provide your personal information, including your name and contact details, through our Sites to register for Lightspeed events and webinars. We will use this information to process the registration and contact you about any changes or updates regarding the event or webinar.

We may share your personal information with speakers or event sponsors, provided you have given your consent. We may also contact you with information about other events and other Lightspeed activities and services provided you have consented to receiving such information. You can unsubscribe from this information at any time (please see the "Opting-out of Communications" section below).

Careers

You can use our <u>careers site</u>, to learn about our firm and apply for open positions by submitting a resume and other information via email. We may also receive resumes from recruitment consultants, Lightspeed employees or other third parties.

Resumes will typically include personal information, including name, contact details, information about academic and professional qualifications and experiences, your interests and the position at Lightspeed for which you are applying.

We will use this personal information to:

- Assess your suitability for the position for which you are applying;
- Contact you in relation to your application;
- Manage and administer our recruitment processes; and
- Provide updates on vacancies at Lightspeed which might be suitable for you, provided you have given your consent.

In the event you are not hired by our firm, we will permanently delete your resume and any other personal information held about you within six months after receiving your application, unless you have given us your consent to keep this information for a longer period in order to inform you about future vacancies which may be of interest.

Contacting us by phone, e-mail or otherwise

When you communicate with us via our <u>Contact Us</u> page, you are asked to provide your name, email address and phone number. We will use this information to respond to your questions and comments. We will request similar personal information in order to confirm your identity when you contact us by phone, email or otherwise.

We will use your personal information to provide you, or permit selected third parties to provide you, with information about goods or services we feel may interest you, provided you have given your consent, which can be withdrawn at any time.

Site Use Information

Our web servers may collect information including the IP address of visitors to our Sites, browser type and version, time zone setting, browser plug-in types and versions, operating system and platform.

We use this personal information for the following purposes:

- To measure the use of our Sites, including number of visits, average time spent on a Site, pages viewed, page interaction information (such as scrolling, clicks, and mouse-overs), etc., and to improve the content we offer;
- To administer the Sites and for internal operations, including troubleshooting, data analysis, testing, research, statistical and survey purposes; and
- As part of our efforts to keep the Sites safe and secure;

We may share with third parties this information or other data on an aggregated basis without the use of any personal information.

Cookie Policy

Overview

Like most websites, we may employ "cookies" or similar technologies. This Cookies Policy tells you about the use of Cookies and similar technologies on Lightspeed 's websites and other applications listed here, <u>www.lightspeed.com/</u> and <u>www.lightspeedinstitutional.com</u> (the "Sites").

When you first access the Sites from certain jurisdictions, you will receive a message advising you that cookies and similar technologies are in use. By continuing to browse the Sites, you signify that you understand and agree to the use of these technologies, as described in this Cookies Policy.

You do not have to accept cookies and consent can be withdrawn at any time (see How to Control Cookies, below). You can change your browser settings to refuse or restrict cookies, and you may delete them after they have been placed on your device at any time. If you do not accept or delete our cookies, some areas of our Sites that you access may take more time to work or may not function properly.

What are cookies?

Cookies are small files containing a string of characters which we may store on your computer or mobile device when you visit the Sites. When you visit the Sites again, the cookies allow us to recognize your browser. Cookies may store your preferences and other information but cannot read data off your hard disk or read cookie files created by other sites.

We may use cookies to deliver content tailored to your interests. We may use information collected with cookies to statistically analyze usage of our Sites and to improve and customize our content and other offerings.

How to Control Cookies

When you first access the Sites from certain jurisdictions, you will receive a message advising you that cookies and similar technologies are in use. By continuing to browse the Sites, you signify that you understand and agree to the use of these technologies, as described in this Cookies Policy.

You do not have to accept cookies and consent can be withdrawn at any time, although you may not be able to use certain features on the Sites. You can do this by activating the settings on your browser that allows you to refuse all or some cookies.

Please follow the links below to helpful information for the most popular browsers:

- **Microsoft Internet Explorer:** <u>https://support.microsoft.com/en-gb/help/17442/windows-internet-explorer-delete-manage-cookies</u>
- Google Chrome: <u>https://support.google.com/chrome/answer/95647?co=GENIE.Platform%3DDesktop&hl=e</u>
- Mozilla Firefox: https://support.mozilla.org/en-US/kb/enable-and-disable-cookies-website-preferences
- Apple Safari: <u>https://support.apple.com/guide/safari/manage-cookies-and-website-data-</u><u>sfri11471/mac</u>

In addition, you can exercise advertising cookie choices by visiting:

- <u>http://www.aboutads.info/choices/</u>,
- http://www.networkadvertising.org/choices/; or
- <u>http://youronlinechoices.com/</u>.

Web Beacons

As well as cookies, we use other technologies to recognize and track visitors to our Sites. A web beacon (also known as a "tracking pixel" or "clear GIF") is a clear graphic image (typically a one-pixel tag) that is delivered through a web browser or HTML e-mail, typically in conjunction with a cookie.

Web beacons allows us, for example, to monitor how users move from one page within our Sites to another, to track access to our communications, to understand whether users have come to our Sites from an online advertisement displayed on a third-party website, to measure how ads have been viewed, and to improve Site performance.

Changes to this Cookies Policy

We may occasionally amend this Cookies Policy to reflect our activities and user feedback, and we reserve the right to make changes to this Cookies Policy at any time.

The provisions contained in this Cookies Policy supersede all previous notices or policies regarding our privacy practices with respect to the Sites.

Please check the "Last Updated" legend at the top of this page to see when this Cookies Policy was last revised.

We encourage you to check frequently to see the current Cookies Policy to be informed of how we are committed to protecting your information and providing you with improved content on our Sites in order to enhance your experience.

Contact

If you have any questions or comments regarding our Cookies Policy or our Sites, please contact us using the <u>Contact</u> <u>Us</u> page.

"Do Not Track" Browser Settings

We do not use technology that recognizes a "do-not-track" signal from your web browser, because we do not track users other than for aggregate statistical purposes.

Opting Out of Communications

If you have subscribed to or are otherwise receiving Lightspeed news, alerts, blog posts, or similar information from us by email and no longer want to receive such information in the future, you may opt-out of receiving these emails by clicking the "unsubscribe" link at the bottom of those emails you receive. Please allow ample time for us to process your request. If you are having difficulty unsubscribing, please contact us using the <u>Contact Us</u> page. Please note that even if you opt-out of receiving emails, you may still receive communications related to your interaction with us (such as confirmation of a registration or form submission) or otherwise as required by law or regulation. Also note that we may need to keep personal information we have collected about you to respect your decision to opt-out, for record-keeping, research and other purposes.

Disclosing Information to Third Parties

We will not share, rent, sell or otherwise disclose any personal information that we collect about you through our Sites, except in any of the following situations:

- You request or consent to the release of your personal information;
- We will disclose your personal information to third-party agents, contractors and payment processors who perform services for us, or to complete or confirm a transaction or series of transactions that you conduct with us;
- We will disclose your personal information to service providers or suppliers where the disclosure will enable that party to perform business, professional or technical support for us;
- Where you have provided your consent, which can be withdrawn at any time, we will provide your personal information to other select third parties approved by Lightspeed as offering products or services relevant and useful to you. The use by and/or content of communications from any third party will be pre-approved by Lightspeed;
- We may disclose personal information about you as part of a merger, acquisition or other sale or transfer of the assets or business of Lightspeed. In such circumstances, we will take steps to inform you of the transfer either directly or indirectly through publishing news of the transaction; and
- We may disclose personal information you have provided to comply with the law, applicable regulations, governmental and quasi-governmental requests, court orders or subpoenas, or to enforce our Terms of Use or other agreement with you; or to protect our rights, property or safety or the rights, property or safety of our users or others. We reserve the right to release information that we collect to law enforcement or other government officials, as we, in our sole and absolute discretion, deem necessary or appropriate.

We will also share aggregated or anonymous information that cannot identify you with third parties. For example, we disclose the number of visitors to the Sites or the number of people who have downloaded a particular document.

Security

Where Personal Information is requested, we use technology designed to encrypt the information that you input before it is sent to us. In addition, we take steps to protect the user data we collect against unauthorized access. However, you should keep in mind that the Sites are run on software, hardware, and networks, any component of which may, from time to time, require maintenance or experience problems or breaches of security beyond our control. While we take steps to protect your personal information and keep it secure, you also play a role in protecting your information. You must maintain the security of your transactions and communications by not sharing your passwords and account information with any unauthorized parties. Please also be aware that despite our best intentions and the guidelines outlined in this privacy policy, no data transmission over the Internet or encryption method can be guaranteed to be 100% secure. We cannot guarantee the security of any information you transmit to us or from our Sites, and therefore you use our Sites at your own risk.

Retention

We will store your personal information, in a form which permits us to identify you, for no longer than is necessary for the purpose for which the personal information is processed. We may retain and use your personal information as necessary to comply with our legal and regulatory obligations, resolve disputes, and enforce our agreements and rights, if it is not technically reasonably feasible to remove it and as otherwise described in this document. Consistent with these requirements, we will try to delete your personal information quickly upon request.

Links to Other Websites

Our Sites may contain links to other websites. This privacy policy only addresses the use and disclosure of your personal information collected through our Sites, if any. If you choose to visit an external website linked from a Site, you will leave our Site. While we try to link only to websites that share our standards and respect for privacy, we are not responsible for the privacy practices of any third parties or the content of linked websites. We encourage you to read the applicable privacy policies and terms and conditions of such parties or websites.

Child Privacy

If you are under the age of majority in your home jurisdiction, please do not use or access the Sites. It is not our intention to collect or use personal information from anyone under the age of majority, and we will not knowingly do so. If we are made aware that we have collected any personal information from minors and are asked to delete such information from our databases, we will promptly do so.

Access from Outside the United States

If you access a Site from outside of the United States, information that we collect about you will be transferred to servers inside the United States, which may involve the transfer of information out of your country of origin. By allowing us to collect personal information about you, you consent to such transfer and processing of your personal information.

Your California Privacy Rights

For California residents only. We may disclose your personal information to our affiliates or other related third parties for their use in marketing to you. Pursuant to California's "Shine the Light Act," California residents are permitted to request information about the manner in which we share certain categories of information with third parties for their marketing use. Please send an email to <u>info@lightspeed.com</u> to request a copy of our disclosure pursuant to California law.

We will provide the required information to your email address in response. Please be aware that not all information sharing is covered by the "Shine the Light" requirements and only information on covered sharing will be included in our response.

Your European Privacy Rights

For European residents only. Under European data protection law, in certain circumstances, you have the right to:

- Request access to any personal information we hold about you ("**Subject Access Request**") as well as related information, including the purposes for processing the personal information, the recipients or categories of recipients with whom the personal information has been shared, where possible, the period for which the personal information will be stored, the source of the personal information, and the existence of any automated decision making;
- Obtain without undue delay the rectification of any inaccurate personal information we hold about you;
- Request that personal information held about you is deleted;
- Prevent or restrict processing of your personal information; and
- Request transfer of personal information directly to a third party where this is technically feasible.

Also, where you believe that Lightspeed has not complied with its obligation under this privacy policy or European law, you have the right to make a complaint to an EU Data Protection Authority.

You can exercise any of these rights by contacting us using the Contact Us page.

Governing Law

By choosing to visit our Sites or provide information to us, you agree that any dispute over privacy or the terms contained in this Privacy Policy will be governed by the laws of the State of New York and the United States of America. You also agree to abide by any limitation on damages contained in our <u>Terms of Use</u>, or other agreements that we have with you which shall be broadly construed as being applicable to all uses of your personal information. Additionally, Lightspeed will not be responsible for any losses arising from inaccurate, deficient, inauthentic or incomplete personal information provided to Lightspeed.

Changes to this Privacy Policy

We reserve the right to make changes to this Privacy Policy at any time. The use of your information is subject to the Privacy Policy and Terms of Use in effect at the time of use. The provisions contained in this Privacy Policy supersede all previous notices or policies regarding our privacy practices with respect to the Sites.

Contact

If you have any questions or comments regarding our Privacy Policy or our Sites, please contact us using the <u>Contact</u> <u>Us</u> page.

FEE DISCLOSURE STATEMENTS

A monthly minimum commission fee will be charged for accounts which maintain less than \$15,000 in total account value (equity) and generate less than \$25 in monthly commissions. The monthly fee assessed on such accounts will be \$25, minus any actual commissions charged in the prior month. Accounts which generate \$25 or more in commissions will not be charged any fee to maintain their accounts at Lightspeed, even if the total account value falls below \$15,000. The equity calculation will be performed on the first business day of each month, using the prior month's commissions to offset any fee.

For example, an account which has a total value of \$14,000 on June 1st and generated \$20 in commission in all of May, will be charged the \$5 difference. If the same account generated no commissions in May, it would be charged the full \$25 amount. Accounts which have more than \$15,000 in equity will not be subject to the monthly minimum commission fee. Additionally, accounts with less than \$15,000 in equity will only have access to Lightspeed Web Trader, our web-based trading platform.

- Margin accounts which do not have free cash available to meet any fees which the account may incur will have the fees deducted from margin and will thus be subject to any applicable margin debit charges.
- Margin accounts with no available margin, or Cash accounts which do not have free cash available, will be subject to the liquidation of positions in order to free up the funds required to pay any fees.
- Market data fees differ based on Professional or Non-Professional subscriber status and do not include any applicable taxes.
- o NYSE data feed subscribers with multiple terminals may be eligible for reduced per-terminal rates.
- o Fees and rate, including Market Center fees and Routing Charges, are subject to change without prior notice.

NOTICE CONCERNING SEC RULE 606

Securities and Exchange Commission Rule 606 of Regulation NMS requires all broker-dealers to make publicly available a quarterly report with regard to their order routing practices for non-directed orders in NMS stocks that are submitted on a held basis and of non-directed orders that are customer orders in NMS securities that are options contracts broken down by calendar month. The Rule excludes from the quarterly report those orders that are directed by a customer to a particular exchange or market for execution.

Lightspeed Financial Services Group LLC's reports are available on the website: www.Lightspeed.com/lightspeed-disclosures/. Click on the appropriate quarter to access the data for the relevant time-period.

In addition, customers may request disclosure of the venues to which their orders were routed on a held basis in NMS stocks in the six months prior to the request. For orders in NMS securities that are option contracts, customers may request the identity of the venue to which their orders were routed for execution in the six months prior to the request, whether the orders were directed orders or non-directed orders, and the time of the transactions, if any, that resulted from such orders. Contact Lightspeed Client Services at 888-577-3123 for any such request.

VOLATILE MARKETS MESSAGE

What are volatile markets? A volatile market is a high-volume trading session marked by extreme price fluctuations and order imbalances resulting from numerous investors entering buy or sell orders for the same security simultaneously. Because of these imbalances, wide price variances in short periods of time are common. On any given day, volatile markets can affect a particular security, groups of securities or the market as a whole. Volatile markets can be caused by material news announcements, market developments and even trading halts taking place in less volatile securities. System access, system response times, system performance and trade executions may be adversely affected during volatile market conditions.

There are risks of trading in volatile markets including, but not limited to, the following. Inaccurate or late price quotes, market order execution prices significantly different from the current price quote, delays in trade executions, delays in open order cancellation requests and delays in trade confirmation reporting. Limit orders can eliminate several of the risks associated with volatile markets. A limit order will limit the execution price to the limit price specified or better, whereas a market order will execute at the current market price. Failure to use a limit order in volatile market conditions could result in customers paying more to purchase securities or receiving less on the sale of securities.

Placing cancel requests on open orders means the customer is sending a message to the system, which in turn sends that cancellation request to the exchange. In volatile markets this process can be significantly delayed. Order execution confirmations may be delayed during volatile markets.

SIPC

Lightspeed Financial Services Group LLC is a member of the Securities Investor Protection Corporation ("SIPC"), which protects cash and securities held for a customer (as defined by the Securities Investor Protection Act of 1970 ("SIPA")) up to \$500,000, of which up to \$250,000 can be a cash claim. Cash (free credit balance) is protected by SIPC only when held in an account for the purpose of investing or reinvesting in securities. You can obtain more information about SIPC, including the SIPC brochure, by contacting SIPC at http://www.sipc.org/ or 202-371-8300.

FUTURES ACCOUNTS

The National Futures Association (NFA) requires that we notify you in writing about the NFA's Background Affiliation Status Information Center ("BASIC"). BASIC contains Commodity Futures Trading Commission ("CFTC") registration and NFA membership information and futures related disciplinary history and non-disciplinary activities contributed by NFA, the CFTC, and the US futures exchanges. BASIC can be accessed at the NFA website <u>http://www.nfa.futures.org/</u> or you can contact the NFA at (800) 621-3570 for additional information.

SIPC does not cover commodity contracts and options on futures.

FINRA'S BROKERCHECK PROGRAM

FINRA BrokerCheck should be your first resource to learn about the professional background, registration/license status and conduct of FINRA registered firms and their registered brokers as well as investment adviser firms and their investment adviser representatives. FINRA makes information on securities professionals and firms available online. To begin your search for information on a securities firm or professional (individual) visit http://www.finra.org. You can obtain more information about this program in the BrokerCheck Program brochure available by calling the BrokerCheck Hotline at 800-289-9999 or contacting FINRA using the "email us" link on the BrokerCheck page of its web site.

OPTIONS DISCLOSURE

Please follow this link to review the OCC's Characteristics & Risks of Standardized Options: <u>http://www.optionsclearing.com/about/publications/character-risks.jsp</u>



20 Headquarters Plaza, North Tower, 7th Floor, Morristown, NJ 07960

ACKNOWLEDGEMENT:

I have read, understand, and retained copies of the following disclosures issued by Lightspeed Financial Services Group LLC. A Registered Representative or Branch Manager has answered all of my questions and has addressed all of my concerns regarding these disclosures.

Customer Identification Program Business Continuity & Disaster Recovery Plan Summary Day-Trading Risk Disclosure Day-Trading Margin Disclosure Extended Hours Risk Disclosure Margin Disclosure Form CRS Privacy Policy Fee Disclosure

If you have any questions regarding the above disclosure or need additional information, please contact your Registered Representative or Branch Manager.

Print Name	Account Number	
Print Name	Account Number	
Customer Signature	Date	
Customer Signature	Date	
Branch Manager Signature	Date	



3RD Party Software Provider Affiliation Attestation

ACCOUNT NUMBER	:
ACCOUNT NAME:	

I	. hereb	y acknowledge that I
•		

have no affiliation with either Turn Key Broker Solutions, Sterling Trading Tech or EZE Software Group (RealTick).

I also agree to immediately notify Lightspeed in the event that my

affiliation status with either of the above-referenced entities should change.

Signature:	 		 	
Print Name:	 			_
Date:	/	/20		

NASDAQ OMX Online Global Subscriber Agreement Summary

Subscribers to the Information must sign The NASDAQ OMX Group, Inc. ("NASDAQ OMX") Subscriber Agreement ("Agreement") or its equivalent in order to receive the Information (Refer to definition in <u>Section</u> <u>12</u>). While all terms are important, NASDAQ OMX asks that you pay particular attention to the following conditions. For additional information, refer to the sections referenced at the end of each condition.

Restrictions on uses and transfers: The subscriber ("Subscriber") may not provide access to information described herein ("Information") or transfer this Agreement to others. The Information is only for use as described by the Non-Professional or Professional Subscriber (for U.S. Information) and Business or Private (for non-US. Information) definitions. [Section 12]

Most types of damages are excluded and remaining damages are limited: NASDAQ OMX is not liable for trading losses, lost profits or incidental, consequential or other indirect damages, even if the Information is untimely or incorrect. Other damages (if any) are strictly limited (in contract, tort or otherwise) to a capped amount. [Section 6 and Section 7]

No implied or statutory warranties or duties: All warranties and duties (if any) are eliminated. There are no express warranties, except for a Limited Warranty regarding efforts only. Stock quotes might not be current and/or accurate. [Section 7]

Subscriber provides an indemnity: Subscriber indemnifies NASDAQ OMX and holds NASDAQ OMX harmless for any Claims or Losses (as described in Section 9) resulting from Subscriber's breach of the Agreement, from Subscriber's infringement of a third-party's intellectual property rights or from any third-party lawsuit related to Subscriber's use or receipt of Information. [Section 9]

Notices; Notification of Changes. All notices and other communications (except for invoices) required to be given in writing under this Agreement shall be directed to the signatories or, in the alternative, to the individuals identified in subsections (a) and (b) below. Notices shall be deemed to have been duly given (i) upon actual receipt (or date of first refusal) by the parties, or (ii) upon constructive receipt (or date of first refusal) by the parties, or (ii) upon constructive receipt (or date of first refusal) if sent by certified mail, return receipt requested, or any other delivery method that actually obtains a signed delivery receipt, to the following addresses or to such other address as any party hereto shall hereafter specify by prior written notice to the other party or parties below, or (iii) upon posting the notice or other communication on the NASDAQTrader website or a successor site. If an email address is provided, NASDAQ OMX may, in lieu of the above, give notice to or communicate with Distributor by email addressed to the persons identified in subsection (a) or to such other email address, Distributor agrees that any receipt received by NASDAQ OMX from Distributor's service provider or internet computer server indicating that the email was received shall be deemed proof that Distributor received the message. If Distributor cannot see or printout all or any portion of the message, Distributor agrees that it is Distributor's responsibility to contact NASDAQ OMX at (301) 978–5307.

(a) if to Subso Name:	criber:	(
Title:		
Address:		_
Telephone #: Fax #:		_
Email:		_

With, in the event of notices of dispute or default, a required copy to:

(b) If to NASDAQ OMX:

NASDAQ OMX Global Data Products 9600 Blackwell Road, Suite 500 Rockville, MD 20850 Phone: +1 301 978 5307 or +45 33 93 33 66 DataAdmin@nasdaqomx.com

With, in the event of notices of default or dispute, a required copy to:

The NASDAQ OMX Group, Inc. Office of General Counsel

Attn: Contracts Group 9600 Blackwell Road Rockville, MD 20850 **Governing Law; Construction:** Everything relating to this Agreement is governed by the laws as detailed in per Appendix 1. For Information received, this Agreement shall be deemed to have been made in the jurisdiction of the applicable NASDAQ OMX Market as detailed in Appendix 1. [Appendix 1]

No oral amendments and only NASDAQ OMX may amend: The Agreement may not be altered orally and may only be altered by NASDAQ OMX pursuant to an agreement procedure which includes notice to either the Subscriber or the Distributor. Failure to terminate the Agreement before, or use of Information thereafter, an amendment will be the Subscriber's consent (or confirmation of earlier consent) to the amendment. [Section 10 and Section 11]

Distributors can impact Subscriber's rights but not NASDAQ OMX's rights: A Distributor does not have the authority to change the Agreement. Distributors are obligated to provide notice of NASDAQ changes to the Subscriber. However, if they do not, NASDAQ OMX's notice to the Distributor is still effective, as to Subscriber including notice of cancellation. [Summary and Section 12].

Requirements of Self-Regulatory Organization; Actions To Be Taken In Fulfillment of Statutory Obligations. Distributor acknowledges that NASDAQ OMX may be under certain restrictions when offering the Information, as detailed in Appendix 1. [Section 1]

Please review the following terms and conditions of the NASDAQ OMX Global Subscriber Agreement before you complete the Signature Section: You must be 18 years of age and must designate yourself as either a Non-Professional or Professional and Business or Private Subscriber in the following section, based on the definitions provided in Section 12. To qualify as Non-Professional or Private Subscriber, you <u>must</u> meet all the terms set forth in Section 12. By completing this section, I agree to the terms and conditions set forth in this NASDAQ OMX Global Subscriber Agreement.

🗌 Individual Subscri	ber - Complete Section A.
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Subscriber Firm or Organization-Complete Section B.

US Subscriber Status:	N
Professional	Ē
Non-Professional	

Non-US Subscriber Status: Business Private US Subscriber Status:

Non-US Subscriber Status:

A. Individual Subscriber Information:

B. Subscriber Firm Information:

(Down Name of In	DIVIDUAL SUBSCRIBER)		(PRINT NAME OF SUBSCRIBER FIRM)
(PRINT NAME OF IN	DIVIDUAL SUBSCRIBER)		(PRINT NAME OF SUBSCRIBER FIRM)
Ву:		Bv:	
(SUBS	CRIBER SIGNATURE)		(SUBSCRIBER SIGNATURE)
		Name of	
Date:	, 20	Signatory:	F PERSON SIGNING ON BEHALF OF SUBSCRIBER FIRM)
		(Print Name o	OF PERSON SIGNING ON BEHALF OF SUBSCRIBER FIRM)
]		Title:	
			AUTHORIZED OFFICER
		Date:	, 20
			,
Distributor:	(PRINT NAME OF DISTRIBUTOR FI	RM)	
By:		Signatory:	(SIGNATURE OF PERSON SIGNING ON BEHALF OF DISTRIBUTOR
(PRINT NAME OF PERS	SON SIGNING on BEHALF of DISTRIE	BUTOR)	(SIGNATURE OF PERSON SIGNING ON BEHALF OF DISTRIBUTOR
Title:		Date:	, 20
Аитн If you signed the Agre or signed electronically	orized Officer ement, make a copy for your re y in error, click on "Cancel". To	cords (electronical confirm your signa	ly or otherwise). If you did not intend to sign, ature and the accuracy of the information legally bind Subscriber to the Agreement.
Signature Confirme	d		Cancel

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NASDAQ OMX Global Subscriber Agreement Terms and Conditions

The Distributor and its agents may not modify or waive any term of this Agreement. Any attempt to modify this Agreement, except by NASDAQ OMX, is void.

1. USE OF DATA. Subscriber may not sell, lease, furnish or otherwise permit or provide access to the Information to any other Person or to any other office or place. Subscriber will not engage in the operation of any illegal business use or permit anyone else to use the Information, or any part thereof, for any illegal purpose or violate any NASDAQ OMX or Securities and Exchange Commission ("SEC") Rule or any Financial Services Authority Rule ("FSA") or other applicable law, rule or regulation. Subscriber may not present the Information rendered in any unfair, misleading or discriminatory format. Subscriber shall take reasonable security precautions to prevent unauthorized Persons from gaining access to the Information.

a. Non-Professional or Private Subscriber — For Non-Professional or Private Subscriber, the Information is licensed only for personal use. By representing to Distributor that Subscriber is a Non-Professional or Private Subscriber, or by continuing to receive the Information at a Non-Professional or Private Subscriber rate, Subscriber is affirming to Distributor and to NASDAQ OMX that Subscriber meets the definition of Non-Professional or Business Subscriber as set forth in <u>Section 12</u> of this Agreement. A Non-Professional or Private Subscriber shall comply promptly with any reasonable request from NASDAQ OMX for information regarding the Non-Professional Subscriber's receipt, processing, display and redistribution of the Information.

b. Professional or Business Subscriber — For Professional or Business Subscriber, the Information is licensed for the internal business use and/or personal use of the Professional or Business Subscriber. Professional or Business Subscribers may, on a non-continuous basis, furnish limited amounts of the Information to customers in written advertisements, correspondence or other literature or during voice telephonic conversations not entailing computerized voice, automated information inquiry systems or similar technologies. Upon request, Professional or Business Subscribers shall make its premises available to NASDAQ OMX for physical inspection of Distributor's Service and of Professional or Business Subscriber's use of the Information (including review of any records regarding use of or access to the Information and the number and locations of all devices that receive Information), all at reasonable times, upon reasonable notice, to ensure compliance with this Agreement.

2. PROPRIETARY DATA. NASDAQ OMX grants to Subscriber a nonexclusive, non-transferable license during the term of the Agreement to receive and use the Information transmitted to it by Distributor and thereafter, to use such Information as permitted under the terms of this Agreement and/or the NASDAQ OMX Requirements. Subscriber acknowledges and agrees that NASDAQ OMX has proprietary rights to the Information that originates on or derives from markets regulated or operated by NASDAQ OMX, and compilation or other rights to Information gathered from other sources. Subscriber further acknowledges and agrees that NASDAQ OMX has proprietary rights to their respective Information. In the event of any misappropriation or misuse by Subscriber or anyone who accesses the Information through Subscriber, NASDAQ OMX or its third-party information providers shall have the right to obtain injunctive relief for its respective materials. Subscriber will attribute source as appropriate under all the circumstances.

3. PAYMENT. Subscriber shall assume full and complete responsibility for the payment of any taxes, charges or assessments imposed on Subscriber or NASDAQ OMX (except for federal, state or local income taxes, if any, imposed on NASDAQ OMX) by any foreign or domestic national, state, provincial or local governmental bodies, or subdivisions thereof, and any penalties or interest relating to the provision of the Information to Subscriber. Interest shall be due from the date of the invoice to the time that the amount(s) that are due have been paid. To the extent permitted by applicable law, Subscriber acknowledges and agrees that the termination of the Distributor's Service for failure to make payments shall not be considered an improper limitation of access by NASDAQ OMX. For Professional or Business Subscribers, if any payment is due directly to NASDAQ OMX under this Agreement, payment in full is due NASDAQ OMX in immediately available funds, in the currency specified by NASDAQ OMX by a check to NASDAQ OMX, by electronic funds transfer to an institution of NASDAQ OMX's choosing or by any other form of payment as specified by NASDAQ

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OMX in Appendix 1, within fifteen (15) days of the date of an invoice, whether or not use is made of, or access is made to, the Information.

4. SYSTEM. Subscriber acknowledges that NASDAQ OMX, in its sole discretion, may from time-to-time make modifications to its system or the Information. Such modifications may require corresponding changes to be made in Distributor's Service. Changes or the failure to make timely changes by Distributor or Subscriber may sever or affect Subscriber's access to or use of the Information. NASDAQ OMX shall not be responsible for such effects. NASDAQ OMX does not endorse or approve any equipment, Distributor or Distributor's Service.

5. EXCLUSIVE REMEDY. NASDAQ OMX shall endeavor to offer the Information as promptly and accurately as is reasonably practicable. In the event that the Information is not available as a result of failure by NASDAQ OMX to perform its obligations under this Agreement, NASDAQ OMX will endeavor to correct any such failure. If the Information is not available, is delayed, is interrupted, is incomplete, is not accurate or is otherwise materially affected for a continuous period of four (4) hours or more during the time that NASDAQ OMX regularly transmits the Information due to the fault of NASDAQ OMX (except for a reason permitted in this Agreement or in NASDAQ OMX's agreement with the Distributor), Subscriber's or any other Person's exclusive remedy against NASDAQ OMX shall be:

a. If Subscriber or any other Person continues to receive the Information or any other data and/or information offered by NASDAQ OMX, a prorated month's <u>credit</u> of any monies due, if any, for the affected Information directly to NASDAQ OMX from Subscriber or, if applicable, from said other Person, for the period at issue; or

b. If Subscriber or any other Person no longer receives either the Information or any other data and/or information offered by NASDAQ OMX, a prorated month's <u>refund</u> of any monies due for the affected Information directly to NASDAQ OMX from Subscriber or, if applicable, from said other Person, for the period at issue.

Such credit or refund shall, if applicable, be requested in writing to NASDAQ OMX with all pertinent details. Beyond the warranties stated in this section, there are no other warranties of any kind — express, implied, statutory (including without limitation, timeliness, truthfulness, sequence, completeness, accuracy, freedom from interruption), implied warranties arising from trade usage, course of dealing, course of performance or the implied warranties of merchantability or fitness for a particular use or purpose.

6. LIMITATION OF LIABILITY.

a. Except as may otherwise be set forth herein, NASDAQ OMX shall not be liable to Subscriber, its Distributor or any other Person for indirect, special, punitive, consequential or incidental loss or damage (including, but not limited to, trading losses, loss of anticipated profits, loss by reason of shutdown in operation or increased expenses of operation, cost of cover or other indirect loss or damage) of any nature arising from any cause whatsoever, even if NASDAQ OMX has been advised of the possibility of such damages.

b. NASDAQ OMX shall not be liable to Subscriber or any other Person for any unavailability, interruption, delay, incompleteness or inaccuracy of the Information that lasts less than four (4) continuous hours during the time that NASDAQ OMX regularly transmits the Information or if the Information is materially affected for less than four (4) continuous hours during the time that NASDAQ OMX regularly transmits the Information that NASDAQ OMX regularly transmits the Information or if the Information is materially affected for less than four (4) continuous hours during the time that NASDAQ OMX regularly transmits the Information.

c. If NASDAQ OMX is for any reason held liable to Subscriber or to any other Person, whether in tort or in contract, the liability of NASDAQ OMX within a single year of the Agreement (one year from the effective data of the Agreement) is limited to an amount of Subscriber's damages that are actually incurred by Subscriber in reasonable reliance (combined with the total of all claims or losses of Subscriber's Distributor and any other Person claiming through, on behalf of or as harmed by Subscriber) and which amount does not exceed the lesser of:

i. For Subscriber or any other person that continues to receive the Information or any other data and/or Information offered by NASDAQ OMX, a prorated month's <u>credit</u> of any monies due directly to NASDAQ OMX from Subscriber or, if applicable, from any other Person, for the Information at issue during the period at issue, or if Subscriber or any other Person no longer receives either the Information or any other data and/or information offered by NASDAQ OMX, a <u>refund</u> of any monies due directly to NASDAQ OMX from Subscriber or, if applicable, from any other Person, for the Information at issue during the period at issue, or if Subscriber or, if applicable, from any other Person, for the Information at issue during the period at issue; or

ii. \$500.

d. This section shall not relieve NASDAQ OMX, Subscriber or any other Person from liability for damages that result from their own gross negligence or willful tortious misconduct or from personal injury or wrongful death claims.

e. Subscriber and NASDAQ OMX understand and agree that the terms of this section reflect a reasonable allocation of risk and limitation of liability.

7. DISCLAIMERS OF WARRANTIES. NASDAQ OMX and its third-party information providers make no warranties of any kind — express, implied or statutory (including without limitation, timeliness, truthfulness, sequence, completeness, accuracy, freedom from interruption), any implied warranties arising from trade usage, course of dealing, course of performance or the implied warranties of merchantability or fitness for a particular use or purpose or noninfringement.

8. THIRD-PARTY INFORMATION PROVIDERS' LIMITATION OF LIABILITY. NASDAQ OMX's third-party information providers shall have no liability for any damages for the accuracy of or for delays or omissions in any of the Information provided by them, whether direct or indirect, lost profits, special or consequential damages of the Subscriber or any other Person seeking relief through Subscriber, even if the third-party information providers have been advised of the possibility of such damages. In no event will the liability of the third-party information providers or their affiliates to Subscriber or any other Person seeking relief through Subscriber, as applicable.

9. CLAIMS AND LOSSES. Subscriber will indemnify NASDAQ OMX and hold NASDAQ OMX and its employees, officers, directors and other agents harmless from any and all Claims or Losses imposed on, incurred by or asserted as a result of or relating to: (a) any noncompliance by Subscriber with the terms and conditions hereof; (b) any third-party actions related to Subscriber's receipt and use of the Information, whether authorized or unauthorized under the Agreement. Each party warrants and represents and will indemnify and hold harmless (and in every case, NASDAQ OMX shall be permitted to solely defend and settle) another party (including NASDAQ OMX) and their officers, directors, employees and other agents, against any Claims or Losses arising from, involving or relating to a claim of infringement or other violation of an intellectual property right by the indemnifying party, its actions or omissions, equipment or other property. This right is conditioned on the indemnified party giving prompt written notice to the indemnifying party (as does not prejudice the defense) of the Claims or Losses and providing cooperation in the defense of the Claims or Losses (without waiver of attorney-client, work-product or other legal privilege, or disclosure of information legally required to be kept confidential).

10. TERMINATION. Subscriber acknowledges that NASDAQ OMX, when required to do so in fulfillment of statutory obligations, may by notice to Distributor unilaterally limit or terminate the right of any or all Persons to receive or use the Information and that Distributor will immediately comply with any such notice and will terminate or limit the furnishing of the Information and confirm such compliance by notice to NASDAQ OMX. Any affected Person will have available to it such procedural protections as are provided by the Act and applicable rules thereunder. In addition to terminations permitted under the Distributor's agreement, this Agreement may be terminated by Subscriber with thirty (30) days written notice to Distributor and by NASDAQ OMX with thirty (30) days written notice either to Distributor or Subscriber. NASDAQ OMX may also alter any term of this Agreement with ninety (90) days written notice either to Distributor or Subscriber breach, discovery of the untruth of any representation of Subscriber, or where directed by the SEC in its regulatory authority, NASDAQ OMX may terminate this Agreement with not less than three (3) days written notice to Subscriber provided either by NASDAQ OMX or Distributor.

11. AMENDMENTS/AGREEMENT. Except as otherwise provided herein, no provision of this Agreement may be amended, modified or waived. No failure on the part of NASDAQ OMX or Subscriber to exercise, no delay in exercising and no course of dealing with respect to any right, power or privilege under this Agreement shall operate as a waiver thereof, nor shall any single or partial exercise of any such right, power or privilege under this Agreement. If any of the provisions of this Agreement or application thereof to any individual, entity or circumstance is held invalid or unenforceable, the remainder of this Agreement, or the application of such terms or provisions to individuals, entities or circumstances other than those as to which they are held invalid or unenforceable, and each such term and provision of this Agreement shall be valid and enforceable to the fullest extent permitted by law. In the event of any conflict between the terms of this Agreement and of the Distributor's agreement, the terms of this Agreement shall prevail as between NASDAQ OMX and Subscriber.

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12. DEFINITIONS.

Act shall mean the Securities Exchange Act of 1934, applicable only to Information disseminated from a NASDAQ OMX Market in the United States.

Affiliate shall mean any individual, corporation, company, partnership, limited partnership, limited liability company, trust, association or other entity that, directly or indirectly through one or more intermediaries, controls, is controlled by, or is under common control with such party.

Claims or Losses — Any and all liabilities, obligations, losses, damages, penalties, claims, actions, suits, costs, judgments, settlements and expenses of whatever nature, whether incurred by or issued against an indemnified party or a third party, including, without limitation, (a) indirect, special, punitive, consequential or incidental loss or damage, (including, but not limited to, trading losses, loss of anticipated profits, loss by reason of shutdown in operation or increased expenses of operation or other indirect loss or damage), and (b) administrative costs, investigatory costs, litigation costs and auditors' and attorneys' fees and disbursements (including in-house personnel).

Distributor shall mean Distributor and its Affiliates as identified in writing to NASDAQ OMX. For purposes of this agreement, "Distributor" shall mean "Vendor".

Distributor's Service — The service from a distributor, including the data processing equipment, software and communications facilities related thereto, for receiving, processing, transmitting, using and disseminating the Information to or by Subscriber.

FSA shall mean a Financial Services Authority in Sweden, the United Kingdom, or other jurisdiction other than the United States.

Information shall mean certain market data and other data disseminated that has been collected, validated, processed, and recorded by the System or other sources made available for transmission to and receipt from either a Redistributor or from NASDAQ OMX relating to: a) eligible securities or other financial instruments, markets, products, vehicles, indicators, or devices; b) activities of a NASDAQ OMX Company; c) other information and data from a NASDAQ OMX Company. Information also includes any element of Information as used or processed in such a way that the Information can be identified, recalculated or re-engineered from the processed Information or that the processed Information can be used as a substitute for Information.

NASDAQ OMX shall collectively mean The NASDAQ OMX Group, Inc., a Delaware limited liability company and its subsidiaries and Affiliates (collectively "NASDAQ OMX").

NASDAQ OMX Markets shall mean the regulated securities and options exchange subsidiaries of NASDAQ OMX and other regulated market subsidiaries of NASDAQ OMX, including, but not limited to , The NASDAQ Stock Market ("NASDAQ"), the OMX Nordic Exchange ("OMX"), NASDAQ OMX BX ("BX"), NASDAQ OMX PHLX ("PHLX"), the Philadelphia Board of Trade ("PBOT"), and NASDAQ OMX Europe. The NASDAQ OMX Markets are each a "NASDAQ OMX Market."

NASDAQ OMX Requirements — All (i) rules, regulations, interpretations, decisions, opinions, orders and other requirements of the SEC or an FSA, as may be applicable based upon the NASDAQ OMX Market from which the Information is received ; (ii) the rules and regulations, disciplinary decision and rule interpretations applicable to NASDAQ OMX Markets (iii) the NASDAQ OMX Markets' decisions, policies, interpretations, operating procedures, specifications, requirements, and other documentation that is regulatory or technical in nature (including, but not limited to, user guides) published on the NASDAQTrader website located at <u>www.NASDAQTrader.com</u> or another website accessible by and made known to Distributor; and (iv) all other applicable laws, statutes, rules, regulations, orders, decisions, interpretations, opinions, and other requirements, whether promulgated by the United States, England, Sweden or any other applicable jurisdiction (including in the area of intellectual property); and (v) the successors, as they may exist at the time, of the components of the NASDAQ OMX Requirements.

NASDAQ Trader shall mean the website located at <u>www.NASDAQTrader.com</u> or its successor site(s).

Or — Includes the word "and".

Person — Any natural person, proprietorship, corporation, partnership or other entity whatsoever.

Subscriber — When it appears alone, the word "Subscriber" encompasses all Non-Professional, Private, Professional and Business Subscribers. All subscribers are deemed Professional or Business unless they are qualified as Non-Professional or Private Subscriber.

U.S. Information

Non-Professional Subscriber — Any natural person who is NOT:

(a) registered or qualified in any capacity with the SEC, the Commodities Futures Trading Commission, any state securities agency, any securities exchange or association or any commodities or futures contract market or association;

(b) engaged as an "investment advisor" as that term is defined in <u>Section 202(a)(11) of the</u> <u>Investment Advisors Act of 1940</u> (whether or not registered or qualified under that Act); or

(c) employed by a bank or other organization exempt from registration under federal or state securities laws to perform functions that would require registration or qualification if such functions were performed for an organization not so exempt.

Professional Subscriber — All other persons who do **<u>not</u>** meet the definition of Non-Professional Subscriber.

Non-U.S. Information

Private Subscriber — A natural person for the purpose of managing the Subscriber's own personal investments and not for any business purpose, nor for the purpose of giving any form of advice to any other person. A Private Use Subscriber may <u>not</u>:

(a) contract for, receive or use Information for the purpose of Private Use on behalf of any other person or any corporation, partnership, limited liability company, trust, association or other form of entity,

(b) contract for, receive or use Information for the purpose of Private Use in any Service that is paid for by another person or any corporation, partnership, limited liability company, trust, association or other form of entity.

A Private Use Subscriber shall, not withstanding the above:

(c) be permitted to contract for, receive or use Information on behalf of or paid for by another natural person (person B) provided that (1) its for the purpose of managing person B's own personal investments and not for any business purpose, and (2) person B have filed a power of attorney or equivalent documentation accordingly with Licensee,

(d) be permitted to contract for, receive or use Information for Private Use on behalf of and/or paid for by a legal entity or other form of non-natural Person in which the Private Use Subscriber has full (100%) ownership and exercises full (100%) control,

(e) Section (c) and (d) may not be combined.

Business Subscriber — All other persons who do <u>not</u> meet the definition of Private Subscriber.

"System" shall mean any system NASDAQ OMX has developed for the creation and/or dissemination of Information.

NASDAQ OMX Global Subscriber Agreement Appendix 1 NASDAQ OMX

1. **INFORMATION.** NASDAQ OMX offers Information that has been collected, validated, processed, and recorded by the System or other sources. For data offered from other sources, the governing laws shall apply as identified below.

Legal Entity and Principal Place of Business	Entity Type	Funds	Governing Laws
The Nasdaq OMX Group, Inc. One Liberty Plaza 165 Broadway, New York, New York 10006	Delaware Corporation	US Dollars	This Agreement shall be construed and enforced in accordance with, and the validity and performance hereof shall be governed by, the laws of the State of New York, without reference to principles of conflicts of laws thereof. Distributor hereby consents to submit to the jurisdiction of the courts in and of the state of New York in connection with any action or proceeding instituted relating to this Agreement.
Nasdaq OMX Information LLC One Liberty Plaza 165 Broadway, New York, New York 10006	Delaware Corporation	US Dollars	This Agreement shall be construed and enforced in accordance with, and the validity and performance hereof shall be governed by, the laws of the State of New York, without reference to principles of conflicts of laws thereof. Distributor hereby consents to submit to the jurisdiction of the courts in and of the state of New York in connection with any action or proceeding instituted relating to this Agreement.
OMX Nordic Exchange Oy Fabianinkatu 14, FI-00131 Helsinki	Finnish company	Euros	This Agreement shall be governed by and construed in accordance with the laws of Sweden. Any dispute that cannot be amicably settled that arises out of this Agreement shall be referred to arbitration and shall be conducted in accordance with the rules for expedited arbitrations of the Arbitration Institute of the Stockholm Chamber of Commerce. All such proceedings shall be held in Stockholm, and shall be conducted in the English language, which shall also be the language of the documents.
NASDAQ OMX BX One Liberty Plaza 165 Broadway, New York, New York 10006	Delaware Corporation	US Dollars	This Agreement shall be construed and enforced in accordance with, and the validity and performance hereof shall be governed by, the laws of the State of New York, without reference to principles of conflicts of laws thereof. Distributor hereby consents to submit to the jurisdiction of the courts in and of the state of New York in connection with any action or proceeding instituted relating to this Agreement.
NASDAQ OMX PHLX One Liberty Plaza 165 Broadway, New York, New York 10006	Delaware Corporation	US Dollars	This Agreement shall be construed and enforced in accordance with, and the validity and performance hereof shall be governed by, the laws of the State of New York, without reference to principles of conflicts of laws thereof. Distributor hereby consents to submit to the jurisdiction of the courts in and of the state of New York in connection with any action or proceeding instituted relating to this Agreement.

Legal Entity and Principal Place of Business	Entity Type	Funds	Governing Laws
NASDAQ OMX Europe London, England	British Company	British Pounds	This Agreement shall construed and enforced in accordance with, and the validity and performance hereof shall be governed by English law, without reference to principles of conflicts of laws thereof. Distributor hereby consents to submit to the jurisdiction of the courts of England and Wales in connection with any action or proceeding instituted relating to this Agreement.
Portal Alliance One Liberty Plaza 165 Broadway, New York, New York 10006	Delaware Corporation	US Dollars	This Agreement shall be construed and enforced in accordance with, and the validity and performance hereof shall be governed by, the laws of the State of New York, without reference to principles of conflicts of laws thereof. Distributor hereby consents to submit to the jurisdiction of the courts in and of the state of New York in connection with any action or proceeding instituted relating to this Agreement.

2. REQUIREMENTS OF SELF-REGULATORY ORGANIZATION; ACTIONS TO BE TAKEN IN FULFILLMENT OF STATUTORY OBLIGATIONS.

(a) Distributor acknowledges that in the United States: (i) several of the NASDAQ OMX Markets are registered with the SEC as national securities exchanges pursuant to Section 6 of the Act, and FINRA is registered with the SEC as a national securities association pursuant to 15A of the Act; (ii) FINRA and NASDAQ OMX have a statutory obligation to protect investors and the public interest, and to ensure that quotation information supplied to investors and the public is fair and informative, and not discriminatory, fictitious or misleading; (iii) Section 19(g)(1) of the Act mandates that FINRA and NASDAQ OMX comply with the NASDAQ OMX Requirements; (iv) NASDAQ OMX has jurisdiction to enforce compliance with certain of the NASDAQ OMX Requirements; (v) FINRA has jurisdiction to enforce compliance with certain of the NASDAQ OMX Requirements; and (vi) NASDAQ OMX is obligated to offer terms that are not unreasonably discriminatory between Distributors, subject to applicable NASDAQ OMX Requirements. Accordingly, Distributor agrees that NASDAQ OMX, when required to do so in fulfillment of its statutory obligations, may, temporarily or permanently, unilaterally condition, modify or terminate the right of any or all individuals or entities to receive or use the Information. NASDAQ OMX shall undertake reasonable efforts to notify Distributor of any such condition, modification or termination, and Distributor shall promptly comply with any such notice within such period of time as may be determined in good faith by NASDAQ OMX to be necessary, consistent with its statutory obligations. Any Person that receives such a notice shall have available to it such procedural protections as are provided to it by the Act and the applicable rules thereunder.

(b) Distributor acknowledges that, in Europe, NASDAQ OMX is obligated to offer terms that are not unreasonably discriminatory between Distributors, subject to applicable NASDAQ OMX Requirements. NASDAQ OMX when required to do so in fulfillment of the its statutory obligations, may, temporarily or permanently, unilaterally condition, modify or terminate the right of any and all individuals or entities to receive or use the Information. NASDAQ OMX shall notify the Distributor of any such condition, modification or termination, and the Distributor shall promptly comply with any such notice within such period of time as may be determined in good faith by NASDAQ OMX to be necessary, consistent with its statutory obligations. If the Distributor receives such notice, it will have available to it all procedural protections provided to it by statute and any applicable regulatory rules.

(c) If Distributor is a member of a NASDAQ OMX Market, then Distributor expressly acknowledges and agrees that (i) this Agreement does not limit or reduce in any way Distributor's obligations and responsibilities as a member of any applicable NASDAQ OMX Market; (ii) this Agreement does not in any way alter the procedures or standards generally applicable to disciplinary or other actions taken by NASDAQ OMX to enforce compliance with, or impose sanctions for violations of, the NASDAQ OMX Requirements; and (iii) the nonpayment of amounts due under this Agreement could result in the suspension or cancellation of Distributor's membership in a NASDAQ OMX Market in accordance with the NASDAQ OMX Requirements.

AGREEMENT FOR RECEIPT OF CONSOLIDATED NETWORK A DATA AND NYSE MARKET DATA

This Agreement permits the undersigned "Subscriber" to arrange with authorized vendors or with the New York Stock Exchange LLC ("NYSE"), as appropriate to receive any one or more Types of Market Data* and to use that Market Data for interrogation* display, tape* display or other purposes not entailing retransmission. This Agreement governs whichever Type(s) of Market Data, means of receipt and use(s) Subscriber receives, arranges and makes. Subscriber and NYSE agree to all terms and conditions of this Agreement.

Subscriber Name

Phone #

Subscriber Address

City	State or Province	Zip	Country
Name and Title of Individual Signing:	Name		Title
Billing address (if different than above):			

SUBSCRIBER	NEW YORK STOCK EXCHANGE LLC On behalf of the CTA Plan Participants (in respect of CTA Network A last sale information) and the CQ Plan Participants (in respect of CQ Network A quotation information) and on its own behalf solely (in respect of NYSE Securities Information*)
Ву:	Ву:
Dated:	Dated:

PART 1: PROVISIONS OF GENERAL APPLICABILITY

1. DEFINITIONS

(a) "Authorizing SRO" means each of the authorizing self-regulatory organizations (i.e., each CTA Plan Participant, each CQ Plan Participant and NYSE).

(b) "Interrogation," as used to differentiate devices and displays, refers to (i) displaying Market Data for a security in response to Subscriber's specific inquiries or (ii) displaying changes in Market Data as they occur for a limited number of securities specified by Subscriber.

(c) "Market Data" means (i) CTA Network A last sale information, (ii) CQ Network A quotation information, (iii) NYSE bond last sale information, (iv) NYSE bond quotation information, (v) NYSE index information and (vi) each other category of market information made available by NYSE as NYSE may designate from time to time. Each of the above categories includes all information that derives from the category's information. Stock and bond last sale prices and information deriving from those prices cease to be "Market Data" 15 minutes after the Authorizing SRO(s) make the prices available over their low speed data transmission facilities. NYSE may alter such period from time to time on 60 days' written notice to Subscriber.

- (d) "NYSE Securities Information" means the Types of Market Data enumerated or referred to in clauses (iii)- (iv) of Paragraph 1(c).
- (e) "Person" includes any natural person or proprietorship or any corporation, partnership or other organization.

(f) "Processor" means the processor under the CTA Plan and CQ Plan.

(g) "Subscriber Device" means a component of Subscriber Equipment* that provides an interrogation display, a tape display or both displays.

(h) "Subscriber Equipment" means any display device, computer, software, wires, transmission facility or other equipment by which Subscriber receives, displays or otherwise uses Market Data.

(i) "Tape," as used to differentiate devices and displays, refers to displaying on a current and continuous basis (i) last sale prices as made available over the data transmission facilities of one or more Authorizing SROs or as retransmitted by an authorized vendor or (ii) a subset of the prices so made available or retransmitted that Subscriber selects on the basis of, for example, transaction size or security.

(j) "Type of Market Data" means the Market Data in any of the categories enumerated or referred to in Paragraph 1(c).

2. PROPRIETARY NATURE OF DATA-Each Authorizing SRO asserts a proprietary interest in its "Relevant Market Data" (i.e., the Market Data that it furnishes to the Processor and in case of NYSE, that it otherwise makes available).

3. NYSE CAPACITY; ENFORCEMENT-Whenever this Agreement requires "NYSE" to take any action, or to receive any payment, information or notice, as to any Type of Market Data, NYSE acts on behalf of the Authorizing SRO(s) for the Type of Market Data. Any Authorizing SRO may enforce this Agreement as to its Relevant Market Data, by legal proceeding or otherwise, against Subscriber and may likewise proceed against any person that obtains its Relevant Market Data other than as this Agreement contemplates. Subscriber shall pay the reasonable attorneys' fees that any Authorizing SRO incurs in enforcing this Agreement against Subscriber.

4. CHARGES

(a) PAYMENT-Subscriber shall pay in United States dollars the applicable charge(s) as from time to time in effect, plus any applicable tax. Charges apply for receipt of Market Data whether or not used.

(b) BILLING-Subscriber will be billed in advance for recurring data and equipment charges on a periodic basis (monthly unless otherwise notified) based upon information that Subscriber or authorized vendors report. Subscriber will be billed upon incurrence for one-time charges, such as those relating to installations, relocations and provision of additional equipment facilities. Subscriber shall pay invoices promptly upon receipt. Errors in and omissions from invoices, and errors or delays in sending, or failures to send or receive, invoices, do not relieve Subscriber of its payment obligations.

5. DATA SECURITY

(a) RETRANSMISSION PROHIBITED-Subscriber shall use Market Data only for its individual use in its business. Subscriber shall neither furnish Market Data to any other person nor retransmit Market Data among its premises.

(b) CONTROL OF EQUIPMENT-Subscriber shall assure that it or its partners or officers and employees have sole control or physical possession of, and sole access to Market Data through, Subscriber Equipment.

(c) DISPLAYS ACCESSIBLE TO THE GENERAL PUBLIC-Notwithstanding the limitations of Paragraphs 5(a) and 5(b), Subscriber may install one or more Subscriber Devices on enclosed portions of premises to which the general public has access if Subscriber (i) controls the premises and access to them and (ii) gives NYSE written notice of the installation. Subscriber may permit individuals who are passing through or visiting the premises to operate or to view the devices on a sporadic basis, and for limited periods of time, during their temporary presence on the premises.

(d) EQUIPMENT SECURITY-Subscriber understands that this Paragraph 5 requires Subscriber to carefully locate and protect Subscriber Equipment. Subscriber shall abide by any written requirements that NYSE specifies to regulate the location or connection of Subscriber Equipment or to otherwise assure compliance with this Paragraph 5. Subscriber guarantees that any person installing or maintaining Subscriber Equipment will comply with this Paragraph 5.

(e) INSPECTION-At any reasonable time, Subscriber shall assure that authorized representatives of NYSE have access to the premises at which Subscriber Equipment is located, and, in the presence of Subscriber's officials, the rights to examine the equipment and to observe Subscriber's use of the equipment.

6. DATA NOT GUARANTEED-Neither NYSE, any other Authorizing SRO nor the Processor (the "disseminating parties") guarantees the timeliness, sequence, accuracy or completeness of Market Data or of other market information or messages disseminated by any disseminating party. No disseminating party shall be liable in any way to Subscriber or to any other person for (a) any inaccuracy, error or delay in, or omission of, (i) any such data, information or message, or (ii) the transmission or delivery of any such data, information or message, or (b) any loss or damage arising from or occasioned by (i) any such inaccuracy, error, delay or omission (ii) of nonperformance, or (iii) interruption in any such data, information or message, due either to any negligent act or omission by any disseminating party or to any "force majeure" (i.e., flood, extraordinary weather conditions, earthquake or other act of God, fire, war, insurrection, riot, labor dispute, accident, action of government, communications or power failure, equipment or software malfunction) or any other cause beyond the reasonable control of any disseminating party.

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7. DISSEMINATION DISCONTINUANCE OR MODIFICATION-The Authorizing SROs may discontinue disseminating any Type of Market Data, may change or eliminate any transmission method and may change transmission speeds or other signal characteristics. The Authorizing SROs shall not be liable for any resulting liability, loss or damages to Subscriber.

8. DURATION; SURVIVAL-Subject to Paragraph 7, either Subscriber or NYSE may terminate this Agreement on 30 days' written notice to the other. In addition, this Agreement terminates 90 days after Subscriber no longer has the ability to receive Market Data as contemplated by this Agreement. Withdrawal of an Authorizing SRO other than NYSE from the CTA Plan and the CQ Plan terminates this Agreement solely as to that Authorizing SRO. Withdrawal of NYSE from the CTA Plan and CQ Plan terminates this Agreement as to all other Authorizing SROs. Paragraphs 3, 5(d), 6, 15(c), 15(e) and 16(e) survive termination of this Agreement.

9. ENTIRE AGREEMENT: MODIFICATIONS-This writing contains the entire agreement between the parties in respect of its subject matter. This Agreement supersedes each previous agreement between Subscriber and NYSE pursuant to which Subscriber has been receiving Market Data except insofar as the earlier agreement covers receipt of Market Data through direct or indirect access to the high speed line described in the CTA Plan or the CQ Plan or any comparable high speed transmission facility that NYSE uses to make NYSE Securities Information available. The parties may only modify this Agreement by a writing signed by or on behalf of each of them.

10. ASSIGNMENTS-Subscriber may not assign all or part of this Agreement without the written consent of NYSE.

11. GOVERNING LAW; CONSTRUCTION-The laws of the State of New York govern this Agreement. It shall be interpreted in accordance with those laws. In prohibiting Subscriber from doing any act, this Agreement also prohibits Subscriber from doing the act indirectly (e.g., by causing or permitting any other person to the act).

12. APPLICABILITY OF 1934 ACT AND PLANS-This Agreement is subject to the Securities and Exchange Act of 1934, the rules under that act, the CTA Plan (as to CTA Network A last sale information) and the CQ Plan (as to CQ Network A quotation information).

13. NOTICES; NOTIFICATION OF CHANGES-The parties shall send communications relating to this Agreement to:

Subscriber (as above)

New York Stock Exchange LLC

11 Wall Street

New York, New York 10005

Attention: Director of Market Data

Subscriber and NYSE may each change its address by written notice to the other. Subscriber shall give NYSE prompt written notice of any change in (a) the Subscriber information listed above, (b) any other information provided to NYSE in connection with initiating the receipt of any Type of Market Data, or (c) any description provided pursuant to Paragraph 15(d).

PART II: SPECIAL PROVISIONS

This Part II applies only to the extent that Subscriber's activity or equipment falls within the scope of one or more of Paragraphs 14 through 16.

14. SECURITIES PROFESSIONALS: FURNISHING DATA TO CUSTOMERS AND BRANCH OFFICES

(a) SCOPE-This Paragraph 14 applies if Subscriber is a securities professional, such as a registered broker-dealer or investment adviser, and is an exception to Paragraphs 5(a), 5(b) and 5(c).

(b) LIMITED PROVISION OF DATA-Solely in the regular course of its securities business, Subscriber may occasionally furnish limited amounts of Market Data to its customers and clients and to its branch offices. Subscriber may so furnish Market Data to its customers and clients who are not on Subscriber's premises solely (i) in written advertisements, educational material, sales literature or similar written communications. or (ii) during telephonic voice communication not entailing the use of computerized voice synthesization or similar technology. Subscriber may so furnish Market Data to its branch offices solely (i) as provided in the preceding sentence, or (ii) through manual entry of the data over its teletype network. Subscriber shall not permit any customer or client to take physical possession of Subscriber Equipment. Subscriber shall abide by any additional limitations that NYSE specifies in writing.

15. REPORTING: RECORDS: EQUIPMENT DESCRIPTION

(a) SCOPE-This Paragraph 15 applies whenever an authorized vendor cannot know (e.g., by virtue of installing equipment or recognizing electronically a unique device identifier) all information necessary to bill Subscriber for applicable charge(s). For example, this Paragraph 15 typically applies to (i) Subscriber Devices not leased from NYSE or an authorized vendor, (ii) portable Subscriber Devices and Subscriber Devices that use portable components (e.g., software) to receive Market Data and (iii) Subscriber's receipt of Market Data through synthesized voice responses over telephones.

(b) REPORTING-Subscriber shall furnish to NYSE in writing such information, in such form and at such times, as NYSE may reasonably specify from time to time to permit billing of Subscriber for applicable charge(s). However, if an authorized vendor provides Market Data to any Subscriber Device, Subscriber shall furnish information regarding the device to the vendor instead of NYSE unless NYSE notifies Subscriber otherwise in writing.

*Whenever an asterisk follows the first use of a term, Paragraph 1 defines the term

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(c) RECORDS-Subscriber shall maintain the records upon which it bases its reporting for two years following the period to <u>which</u> the records relate. Solely to monitor Subscriber's compliance with this Paragraph 15, authorized representatives of NYSE may examine and verify those records at any reasonable time in the presence of Subscriber's officials.

(d) EQUIPMENT DESCRIPTIONS-Upon NYSE's written request, Subscriber shall provide NYSE with a description acceptable to NYSE of any Subscriber Equipment that an authorized vendor or an Authorizing SRO does not supply.

(e) INDEMNIFICATION-Subscriber shall indemnify and hold harmless each Authorizing SRO from and against any liability, loss or damages caused by (i) any inaccuracy in or omission from, (ii) Subscriber's failure to furnish or to keep, or (iii) Subscriber's delay in furnishing or keeping, any report or record that this Paragraph 15 requires. Subscriber shall do so even if Subscriber depends on information from a third party and the third party caused the inaccuracy, omission, failure or delay. Without limiting the generality of the foregoing, if NYSE determines that, as a consequence of any such inaccuracy, omission, failure or delay, applicable Subscriber charges were not billed when incurred, Subscriber may be billed for those charges and Subscriber shall promptly pay those charges plus any applicable tax.

16. EQUIPMENT SUPPLIED BY AUTHORIZING SROS

(a) SCOPE: DEFINITION This Paragraph 16 applies to Subscriber Equipment that one or more Authorizing SROs supply ("SRO Equipment").

(b) OWNERSHIP-The Authorizing SRO(s) or their supplier(s) own SRO Equipment. Subscriber shall not relocate, remove or alter SRO Equipment, or attach to SRO Equipment any equipment other than authorized equipment that an authorized vendor supplies, without NYSE's written consent. Subscriber shall return SRO Equipment in the same condition as it was when installed except for normal wear and tear and for failures for which the Authorizing SROs are responsible under Paragraph 16(d).

(c) ACCESS TO PREMISES-Subscriber shall assure that authorized representatives of the Authorizing SRO's and of their suppliers and service contractors may install, repair, maintain, relocate and replace SRO Equipment, and may remove any SRO Equipment that Subscriber no longer wants or to which it is no longer entitled, at any reasonable time.

(d) SITE PREPARATION AND MAINTENANCE-Subscriber shall prepare the site for SRO Equipment in a manner acceptable to the Authorizing SROs and shall bear all costs of providing adequate space and power. The Authorizing SROs shall maintain SRO Equipment subject to applicable charges. Maintenance includes repair or replacement of failed SRO Equipment and parts as necessary. Extraordinary charges may apply if Subscriber caused the failure.

(e) WARRANTY AND SCOPE OF LIABILITY-THE AUTHORIZING SROS PROVIDE NO WARRANTY, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Paragraph 16(d) sets forth the Authorizing SROs' entire liability for performance of SRO Equipment. The Authorizing SROs' liability to Subscriber for any liability, loss or damages relating to SRO Equipment other than for the cost of maintaining, repairing or replacing SRO Equipment, whether based in contract, in tort (including negligence and strict liability) or any other theory, shall in the aggregate not exceed the lesser of (i) \$1000 or (ii) the total charges to Subscriber under this Agreement for the period preceding the breach or injury. The foregoing limitations do not apply to personal injury claims. In no event shall any Authorizing SRO be liable (i) for any indirect, incidental, special, consequential or punitive liability, loss or damages relating to SRO Equipment, regardless of the form of the action and foreseeability of the liability, loss or damages, or (ii) for any liability, loss or damages due to any "force majeure" (see Paragraph 6) or for any other cause beyond the reasonable control of the Authorizing SRO.

Form 2-207 Rev. 3/22

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OPTIONS PRICE REPORTING AUTHORITY Professional Subscriber Agreement

The undersigned ("Subscriber") hereby applies to Options Price Reporting Authority, LLC ("OPRA") for the privilege of receiving current options last sale and quotation information and other information transmitted over the information reporting system administered by OPRA (the "Information"). OPRA conducts its affairs pursuant to that certain Limited Liability Company Agreement of Options Price Reporting Authority, LLC dated as of January 1, 2010, as it may be amended from time to time. Said Agreement is a National Market System Plan as defined in Rule 600(b)(43) of Regulation NMS under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and said Agreement as amended from time to time accordingly is referred to in this Agreement as the "Plan." The Plan authorizes the exchanges that are from time to time parties to the Plan to act jointly to disseminate the Information. Such exchanges, in respect of the time during which they are parties to the Plan, are hereinafter sometimes collectively referred to as the "Participant Exchanges" and individually as a "Participant Exchange".

As a condition of being approved to receive the Information, Subscriber hereby represents to and agrees with OPRA as follows:

- 1. Subscriber's full name and business address is:
- 2. The business conducted by Subscriber is:
- 3. For the privilege of receiving the Information, Subscriber agrees to pay OPRA fees in such amount and at such times as shall be established by OPRA from time to time and set forth in a written notice to Subscriber plus any applicable federal, state or local taxes. No increase in such fees shall be effective less than thirty (30) days after written notice of such increase is sent to Subscriber.
- 4. The last sale and quotation information included in the Information is and shall remain the property of the respective Participant Exchange on which the reported transaction took place or the reported quotation was entered. Neither any Participant Exchange nor any other provider to OPRA shall be deemed to have waived any of its proprietary interests in any Information as a result of the furnishing of the same to Subscriber by OPRA. Subscriber shall make no use of the Information except in compliance with the terms of this Agreement.
- Subscriber shall receive the Information only at its principal place of business and/or its branch offices and only for internal use in its business. Subscriber shall not, without the prior approval of OPRA, furnish the Information, nor permit the Information to be furnished, to any other person or place.
- 6. Subscriber is not engaged in, and will not engage in, the operation of any illegal business and will not use, or permit anyone else to use, the Information for any illegal purpose.
- 7. Subscriber shall at all reasonable times permit OPRA, through OPRA's duly authorized representatives and upon reasonable notice during ordinary business hours, to have access to Subscriber's records with respect to its use of OPRA Data and the locations where the Information is received for the purpose of observing the use made of the Information; provided, however, that this right of inspection shall extend only so far as may be necessary to insure compliance by Subscriber with the provisions of this Agreement and any Riders hereto and that, at the request of Subscriber, OPRA shall maintain the confidentiality of any confidential or proprietary information concerning Subscriber's use of the Information. Subscriber shall maintain each record pertaining to its use of OPRA Data in a reasonably accessible place and in a manner that is reasonably secure in accordance with standard industry practice for not less than three years.
- 8. NEITHER OPRA, OPRA'S PROCESSOR NOR ANY PARTICIPANT EXCHANGE GUARANTEES THE TIMELINESS, SEQUENCE, ACCURACY OR COMPLETENESS OF ANY OF THE INFORMATION, AND NEITHER OPRA, OPRA'S PROCESSOR NOR ANY PARTICIPANT EXCHANGE SHALL BE LIABLE IN ANY WAY TO SUBSCRIBER OR TO ANY OTHER PERSON FOR ANY LOSS, DAMAGES, COST OR EXPENSE WHICH MAY ARISE FROM ANY FAILURE OF PERFORMANCE BY OPRA, OPRA'S PROCESSOR OR ANY PARTICIPANT EXCHANGE, OR FROM ANY DELAYS, INACCURACIES, ERRORS IN, OR OMISSIONS FROM ANY OF THE INFORMATION OR THE TRANSMISSION OR DELIVERY THEREOF, WHETHER OR NOT DUE TO ANY NEGLIGENT ACT OR OMISSION ON THE PART OF OPRA, OPRA'S PROCESSOR OR ANY PARTICIPANT EXCHANGE. IN NO EVENT SHALL OPRA, OPRA'S PROCESSOR OR ANY PARTICIPANT EXCHANGE. IN NO EVENT SHALL OPRA, OPRA'S PROCESSOR OR ANY PARTICIPANT EXCHANGE BE LIABLE FOR ANY INCIDENTAL, SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES, INCLUDING BUT NOT LIMITED TO LOST PROFITS, TRADING LOSSES, OR DAMAGES RESULTING FROM INCONVENIENCE OR LOSS OF USE OF THE SERVICE.
- The Subscriber's privilege of receiving the Information hereunder shall continue in force until the expiration of thirty (30) days after written notice shall have been delivered by Subscriber to OPRA or by OPRA to Subscriber of an intention to terminate this Agreement, unless sooner terminated by OPRA in accordance with paragraph 10 hereof.
- 10. Notwithstanding the provisions of paragraph 9 above, Subscriber's privilege of receiving the Information hereunder may be denied or terminated forthwith at any time by OPRA upon a determination that Subscriber has violated any provision of this Agreement or that such action is necessary or appropriate in the public interest or for the protection of investors. In the event OPRA does not approve Subscriber to receive the Information or subsequently terminates Subscriber's privilege of receiving the Information for reasons other than the non-payment of fees specified from time to time by OPRA as provided in paragraph 3 hereof, such action shall be taken only after Subscriber has been given notice and opportunity for a hearing; provided, however, that OPRA may terminate Subscriber's privilege of receiving the Information prior to such notice and hearing where it is determined that immediate termination is appropriate and in the public interest or for the protection of investors, in which event Subscriber shall be entitled to notice and hearing as soon as practicable following such termination. When Subscriber is adversely affected by final action of OPRA pursuant to this paragraph, Subscriber shall be entitled to have such action reviewed in accordance with the applicable rules and regulations of the Securities and Exchange Commission.
- 11. Nothing herein shall be deemed to prevent, or restrict in any manner whatsoever, the exercise by OPRA of its rights, without any notice and without any liability to Subscriber or to any other person, to furnish, or to contract with any other person to furnish, any element of Information by any means whatever, or to attach devices or equipment of any design or manufacture to circuits carrying Information, on such terms and conditions as OPRA may determine. OPRA may: (a) make such changes in the speed of transmission, the specifications governing the format of Information, or other characteristics of the Information as OPRA may from time to time determine (even if such changes would require that Subscriber make changes in its service or equipment), or

(b) discontinue furnishing elements of Information to Subscriber, or (c) discontinue circuits carrying Information; provided, however, that OPRA agrees to give Subscriber prior notice (up to ninety (90) days, and not less than sixty (60) days) of any such action.

- 12. Neither OPRA nor any Participant Exchange shall be liable to Subscriber or to any other person or entity for any amount which Subscriber may be obligated to pay the supplier or lessor of any equipment through which Subscriber receives the Information.
- 13. Subscriber certifies the accuracy of the information provided herein and agrees to inform OPRA promptly at its address set forth below of any changes in such information and to furnish OPRA any additional information requested by it in connection with Subscriber's receipt of the Information.
- 14. The terms and conditions hereof shall be subject to any applicable provisions of the Securities Exchange Act of 1934, as amended (the "Exchange Act") and any rules and regulations promulgated thereunder. Subject only to the foregoing, this Agreement, together with any Riders to this Agreement that are in effect from time to time, constitutes the entire agreement between OPRA and Subscriber relating to the furnishing of Information to Subscriber and the use thereof. This Agreement supersedes any previous agreement between OPRA and Subscriber with respect to such subject matter; provided, that any Riders (including, without limitation, any Direct Circuit Connection Rider, Indirect (Vendor Pass-through) Circuit Connection Rider, and any Voice-Synthesized Market Data Service Rider) to any such previous agreement shall continue in effect as Riders to this Agreement unless terminated or superseded in accordance with their respective terms. This Agreement and any Riders hereto shall be construed in accordance with and governed by the laws of the State of Illinois.
- 15. Subscriber shall not assign this Agreement in whole or in part without the prior written consent of OPRA, except that (subject to OPRA's right to terminate this Agreement pursuant to Section 9) Subscriber may assign this Agreement in its entirety to a successor entity upon merger or consolidation of Subscriber, or to an entity acquiring all or substantially all of the property, assets and business of Subscriber, in each case provided that the successor entity agrees to be bound by this Agreement in its entirety. Subject to the foregoing, this Agreement shall bind and inure to the benefit of the assignees and successors of the parties hereto.

Dated:,	
	Name of Subscriber
	Signature:
	Name:
BILLING INFORMATION TO BE COMPLETED BY SUBSCRIBER (Notify OPRA promptly of any changes to the following information)	Title:
Subscriber Name	
Bill to the attention of	
Address	
Phone Number	
Billing Email Address	
INVOICES ARE SENT BY EMAIL ONLY	
Vendor(s) providing service	
Vendor Account number	
Subscriber No	LY
Location No.	OPTIONS PRICE REPORTING AUTHORITY
Start Date	400 SOUTH LASALLE STREET CHICAGO, ILLINOIS 60605
Number of Devices	USA (312) 786-7195 <u>opra@opraplan.com</u>

Addendum - General Data Protection Regulation (GDPR) https://www.opradata.com/agreements/opra_gdpr_addendum.pdf

Vendor may not modify or waive any term of this Agreement. Any attempt to modify this Agreement, except by Bats Global Markets, Inc. or its affiliates (collectively, "Bats"), is void.

This Bats Global Markets, Inc. Subscriber Agreement (this "Agreement"), with an effective date as of the last date executed on the signature page hereof, is made by and between the vendor referenced below ("Vendor") and the subscriber referenced below ("Subscriber").

1. Definitions. Capitalized terms used herein shall have the meanings set forth in this Section 1.

"Claims or Losses" shall mean any and all liabilities, obligations, losses, damages, penalties, claims, actions, suits, costs, judgments, settlements and expenses of any nature, whether incurred by or issued against an indemnified party or a thirdparty, including, without limitation, (a) indirect, special, punitive, consequential or incidental loss or damage, and (b) administrative costs, investigatory costs, litigation costs and auditors' and attorneys' fees and expenses (including in-house personnel).

"Exchange Data" shall mean certain data and other information relating to securities or other financial instruments, products, vehicles or devices; or relating to Persons regulated by Bats or to activities of Bats; or gathered by Bats from other sources.

"Non-Professional Subscriber" shall mean any natural person who is <u>not</u>: (a) registered or qualified in any capacity with the SEC, the Commodities Futures Trading Commission, any state securities agency, any securities exchange or association, or any commodities or futures contract market or association; (b) engaged as an "investment advisor" as that term is defined in Section 202(a)(11) of the Investment Advisors Act of 1940 (whether or not registered or qualified under that Act); or (c) employed by a bank or other organization exempt from registration under federal or state securities laws to perform functions that would require registration or qualification if such functions were performed for an organization not so exempt.

"Person" shall mean any individual, corporation, limited liability company, trust, joint venture, association, company, limited or general partnership, unincorporated organization, or other entity.

"Professional Subscriber" shall mean all other Persons who do not meet the definition of Non-Professional Subscriber.

"SEC" shall mean the U.S. Securities and Exchange Commission.

"Subscriber" shall mean, collectively, all Non-Professional Subscribers and Professional Subscribers.

"Vendor" shall mean "Data Recipient," as that term is defined in the Bats Global Markets, Inc. Data Agreement, as may be modified from time to time.

"Vendor's Service" shall mean the service from a Vendor, including the data processing equipment, software, and communications facilities related thereto, for receiving, processing, transmitting, using, and disseminating Exchange Data to or by Subscriber.

2. Use of Data. Subscriber may not sell, lease, furnish or otherwise permit or provide access to Exchange Data to any other Person or to any other office or place. Subscriber will not engage in the operation of any illegal business use or permit anyone else to use Exchange Data, or any part thereof, for any illegal purpose or violation of any Bats or SEC rule or regulation. Subscriber may not present Exchange Data rendered in any unfair, misleading, or discriminatory format. Subscriber shall take reasonable security precautions to prevent unauthorized Persons from gaining access to Exchange Data.

<u>Use by Non-Professional Subscribers</u>. Exchange Data is licensed only for personal use by a Non-Professional Subscriber. By representing to Vendor that Subscriber is a Non-Professional Subscriber, or by continuing to receive Exchange Data at a Non-Professional Subscriber rate, Subscriber is affirming to Vendor and Bats that Subscriber meets the definition of Non-Professional Subscriber as set forth herein. A Non-Professional Subscriber shall comply promptly with

any reasonable request from Bats, or its designee, for information regarding the Non-Professional Subscriber's receipt, processing, display, use, and redistribution of Exchange Data.

<u>Use by Professional Subscribers</u>. Exchange Data is licensed for internal business use and/or personal use by a Professional Subscriber. Professional Subscriber may, on a non-continuous basis, furnish limited amounts of Exchange Data to customers in written advertisements, correspondence, or other literature during voice telephonic conversations not entailing computerized voice, automated information inquiry systems, or similar technologies. Professional Subscriber shall make its premises available to Bats, or its designee, for physical inspection of Vendor's Service and of Professional Subscriber's use of Exchange Data (including review of any records regarding use of or access to Exchange Data and the number and locations of all devices that receive Exchange Data), all at reasonable times and upon reasonable notice, to ensure compliance with this Agreement.

3. Proprietary Data. Bats grants to Subscriber a non-exclusive, non-transferable license during the term of the Agreement to receive Exchange Data distributed to it by Vendor and, thereafter, to use such Exchange Data as permitted under the terms of this Agreement and all applicable laws, statutes, rules, and regulations of Bats and the SEC, including but not limited to, Bats' rule filings, Bats' decisions and interpretations and any specifications or successors of such laws, statutes, rules, and regulations. Subscriber acknowledges and agrees that Bats and its affiliates have proprietary rights to Exchange Data gathered from other sources. Subscriber further acknowledges and agrees that Bats' third-party information providers have exclusive proprietary rights to their respective information. In the event of any misappropriation or misuse by Subscriber or anyone who accesses Exchange Data through Subscriber, Bats or its third-party information providers shall have the right to obtain injunctive relief for its respective materials. Subscriber shall attribute the source of Exchange Data as appropriate under all circumstances.

4. Payment. Subscriber shall assume full and complete responsibility for the payment of any taxes, charges, or assessments imposed on Subscriber or Bats (except for U.S. federal, state, or local incomes taxes, if any, imposed on Bats) by any foreign or domestic national, state, provincial, or local governmental bodies, or subdivisions thereof, and any penalties or interest relating to the provision of Exchange Data to Subscriber. Interest shall be due from the date of the invoice to the time that the amounts that are due have been paid. To the extent permitted by applicable law, Subscriber acknowledges and agrees that the termination of Vendor's Services for failure to make payments shall not be considered an improper limitation of access by Bats. For Professional Subscribers, if any payment is due directly to Bats under this Agreement, payment in full is due Bats in immediately available funds within 30 days of the date of an invoice, whether or not use is made of, or access it made to, Exchange Data. Subscriber agrees to pay Bats a late charge in the amount of 1% per month on all past due amounts that are not the subject of a legitimate and bona fide dispute.

5. System. Subscriber acknowledges that Bats, in its sole discretion, may from time to time make modifications to its system or Exchange Data. Such modifications may require corresponding changes to be made to Vendor's Service. Changes or the failure to make timely changes by Vendor may sever, delay, or otherwise affect Subscriber's access to or use of Exchange Data. Bats shall not be responsible for any such effects. Bats does not endorse or approve any Vendor, Vendor's Service or equipment utilized by Vendor or Subscriber.

6. Limitation of Liability.

Bats, its officers, directors, shareholders, employees, agents and consultants shall not be liable to Subscriber or to any other Person for any inaccurate or incomplete Exchange Data received from Bats or from Vendor, any delays, interruptions, errors, or omissions in the furnishing thereof, or any direct, indirect or consequential damages arising from or occasioned by said inaccuracies, delays, interruptions, errors or omissions.

This Section shall not relieve Bats, Vendor, Subscriber, or any other Person from liability for damages that result from their own gross negligence or willful tortious misconduct or from personal injury or wrongful death claims.

Bats, Vendor, and Subscriber understand and agree that the terms of this Section reflect a reasonable allocation of risk and limitation of liability.

7. Disclaimer of Warranties. SUBSCRIBER EXPRESSLY ACKNOWLEDGES THAT BATS AND ITS THIRD-PARTY INFORMATION PROVIDERS DO NOT MAKE ANY REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OR ANY WARRANTIES OF MERCHANTABILITY, QUALITY OR FITNESS FOR A PARTICULAR PURPOSE. 8. Third-Party Information Providers' Limitation of Liability. Bats' third-party information providers shall have no liability for any damages, whether direct or indirect, whether lost profits, indirect, special, or consequential damages of Subscriber or any other Person seeking relief through Subscriber relating to the accuracy of or delays or omissions in any Exchange Data provided by Bats' third-party information providers, even if the third-party information providers have been advised of the possibility of such damages. In no event will the liability of the third-party information providers or their affiliates to Subscriber or any other Person seeking relief through Subscriber pursuant to any cause of action, whether in contract, tort, or otherwise, exceed the fee paid by Subscriber or any other Person seeking relief through Subscriber, as applicable.

Claims and Losses. Subscriber agrees to indemnify and hold harmless Bats, its owners, subsidiaries, affiliates, 9. officers, directors, employees, agents, and any related Persons from any and all Claims or Losses imposed on, incurred by, or asserted as a result of or relating to: (a) any noncompliance by Subscriber with the terms and conditions hereof; and (b) any third-party actions related to Subscriber's receipt and use of Exchange Data, whether authorized or unauthorized under this Agreement. Each party agrees to indemnify and hold harmless (and in every case, Bats shall be permitted to solely defend and settle) another party (including Bats) and their owners, subsidiaries, affiliates, officers, directors, employees, agents, and any related Persons, against any Claims or Losses arising from, involving, or relating to a claim of infringement or other violation of an intellectual property right by the indemnifying party provided that: (a) the indemnified party promptly notifies the indemnifying party in writing of the Claims or Losses; and (b) the indemnified party reasonably cooperates in the defense of the Claims or Losses.

Termination. Subscriber acknowledges that Bats, when required to do so in fulfillment of statutory obligations or 10. otherwise, may by notice to Vendor unilaterally limit or terminate the right of any or all Persons to receive or use Exchange Data, or any part thereof, and that Vendor shall immediately comply with any such notice and terminate or limit the furnishing of Exchange Data and confirm such compliance by written notice to Bats. Any affected Person will have available to it such procedural protections as are provided by the Securities Exchange Act of 1934 (the "Act") and applicable rules and regulations thereunder. In addition to the termination rights permitted under any agreement Subscriber may have with Vendor, this Agreement may be terminated by Subscriber upon 30 days' written notice to Vendor and by Bats upon 30 days' written notice either to Vendor or Subscriber. In the event of Subscriber's breach, the discovery of the untruth of any representation or warranty of Subscriber, or where directed by the SEC in its regulatory authority, Bats may terminate this Agreement upon not less than 3 days' written notice to Subscriber provided either by Bats or Vendor.

11. Notices. All communications required to be given in writing to Bats under this Agreement shall be directed to:

Bats Global Markets, Inc. 8050 Marshall Drive, Suite 120 Lenexa, KS 66214 Attn: Legal Department

Direct communication to Subscriber at the last address known to Vendor shall be considered given (a) upon actual receipt if delivered by email, or (b) upon posting the notice or other communication on www.bats.com or a successor site. Subscriber promptly shall give written notice to Vendor of any change in the name or place of residence or business at which Exchange Data is received.

12. Assignment. This Agreement shall inure to the benefit of and shall be binding upon the parties hereto and their respective permitted successors and assigns. Neither Vendor nor Subscriber shall assign this Agreement (including by operation of law) without the prior written consent of Bats, provided, however, that Bats shall not unreasonably withhold such consent. Notwithstanding the foregoing, Vendor or Subscriber may assign this Agreement to an affiliate or subsidiary without the prior written consent of Bats, provided that the assigning party is not currently in breach of this Agreement or delinquent in any fees owed to Bats. Bats may, as permitted by the Act, assign or transfer this Agreement or any of its rights or obligations hereunder to a related or unrelated party upon notice to Vendor and Subscriber.

13. Severability. Each provision of this Agreement will be deemed to be effective and valid under applicable law, but if any provision of this Agreement is determined to be invalid, void, or unenforceable under any law, rule, administrative order or judicial decision, that determination will not affect the validity of the remaining provisions of this Agreement.

14. Entire Agreement; Amendment; Waiver. This Agreement constitutes the complete and entire agreement of the parties to this Agreement with respect to its subject matter and supersedes all prior writings or understandings. If there is any conflict and/or inconsistency between this Agreement and Vendor's agreement with Subscriber, the terms of this Agreement shall prevail as between Bats and Subscriber. Bats may modify any term of this Agreement Updated February 19, 2016

upon 60 days' written notice either to Vendor or Subscriber, and any use of Exchange Data after such date shall be deemed acceptance of the new term or condition. No failure on the part of Bats or Subscriber to exercise, no delay in exercising, and no course of dealing with respect to any right, power, or privilege under the Agreement shall operate as a waiver thereof, nor shall any single or partial exercise of any such right, power, or privilege preclude any other or further exercise thereof or the exercise of any other right, power, or privilege under this Agreement.

15. Governing Law; Venue. This Agreement will be governed by and interpreted in accordance with the internal laws of the State of New York, USA. Subscriber hereby submits to the jurisdiction of the state and federal courts in and for the State of New York, USA for the resolution of any dispute arising under this Agreement.

16. Headings. Section headings are included for convenience only and are not to be used to construe or interpret this Agreement. All references contained herein to sections or subsections shall refer to the sections or subsections of this Agreement, unless specific reference is made to the sections or subsections of another document.

17. Third-Party Beneficiary. Vendor and Subscriber hereby designate Bats as a third-party beneficiary of this Agreement, having the right to enforce any provision herein.

18. Cumulative Remedies. Except as otherwise limited herein, all rights and remedies provided in this Agreement are cumulative and not exclusive, and the exercise by either party of any right or remedy does not preclude the exercise of any other rights or remedies that may now or subsequently be available at law, equity, by statute, in any other agreement between the parties (including without limitation the Additional Agreements) or otherwise.

19. Counterparts. This Agreement may be executed in one or more counterparts, which shall each be considered an original but all of which shall constitute one and the same Agreement.

[Remainder of page intentionally left blank. Signature page follows.]

IN WITNESS WHEREOF the parties hereto have caused this Agreement to be executed by their duly authorized officers.

Subscriber Typ	an: Individual Complete Section A	
subscriber ry		
	Firm or Organization – Complete Section B.	
A. Individual Subscriber Information Subscriber Name:		
		21
Signat	ure:	Date:
Subsc	riber Status:	essional*
	Non-Professional Subscriber, you <u>must</u> meet all of the terms set izational Subscriber Information	
Subscriber Organization Name:		_
Repres	sentative Name:	Title:
Signat	ure:	Date:
	ative must be authorized in writing by the organization or firm to	
The Represent equest docume	Intation evidencing this authority.	execute the Agreement. Bats m
equest docume	ormation (for Vendor or Data Provider Use Only)	execute the Agreement. Bats m
vendor Info Vendor Vendo	ormation evidencing this authority. Formation (for Vendor or Data Provider Use Only)	
vendor Info Vendor Info Vendo Repres	ormation (for Vendor or Data Provider Use Only)	Title: Date: