Form 1	UNITED STATES SECURITIES AND EXCHANGE COMMISSION
Page 1	WASHINGTON, D.C. 20549
xecution	APPLICATION FOR, AND AMENDMENTS TO APPLICATION FOR

PLICATION FOR, REGISTRATION AS A NATIONAL SECURITIES EXCHANGE OR EXEMPTION (MM/DD/YY): USE ONLY

OFFICIAL

Date filed

Page ROM REGISTRATION PURSUANT TO SECTION 5 OF THE EXCHANGE ACT WARNING: Failure to keep this form current and to file accurate supplementary information on a timely basis, or the failure to keep accurate books and records or otherwise to comply with the provisions of law applying to the conduct of the applicant would violate the federal securities laws and may result in disciplinary, administrative, or criminal action. INTENTIONAL MISSTATEMENTS OR OMISSIONS OF FACTS MAY CONSTITUTE CRIMINAL VIOLATIONS □ APPLICATION **M** AMENDMENT NYSE Arca, Inc. State the name of the applicant: SEC 2. Provide the applicant's primary street address (Do not use a P.O. Box): Mail Processing 11 Wall Street, New York, NY 10005 Section Provide the applicant's mailing address (if different): AUG 10 2016 Washington DC 11 Wall Street, New York, NY 10005 Provide the applicant's business telephone and facsimile number: 212-656-2938 212-656-8101 (Telephone) (Facsimile) 5. Provide the name, title, and telephone number of a contact employee: Martha Redding Assistant Secretary 212-656-2938 (Name) (Title) (Telephone Number) Provide the name and address of counsel for the applicant: Martha Redding NYSE Holdings LLC 11 Wall Street, New York, NY 10005 December 31 Provide the date applicant's fiscal year ends: □ Sole Proprietorship Partnership 8. Indicate legal status of applicant:

Corporation ☐ Limited Liability Company □ Other (specify): If other than a sole proprietor, indicate the date and place where applicant obtained its legal status (e.g. state where incorporated, place where partnership agreement was filed or where applicant entity was formed): (a) Date (MM/DD/YY): (b) State/Country of formation: (c) Statute under which applicant was organized: Delaware General Corporation Law EXECUTION: The applicant consents that service of any civil action brought by , or notice of any proceeding before, the Securities and Exchange Commission in connection with the applicant's activities may be given by registered or certified mail or confirmed telegram to the applicant's contact employee at the main address, or mailing address if different, given in Items 2 and 3. The undersigned, being first duly aworn, deposes and says that he/she has executed this form on behalf of , and with the authority of , said applicant. The undersigned and applicant represent that the Information and statements contained herein, including exhibits, schedules, or other documents att ached hereto, and other information filed herewith, all of which are made a part hereof, are current, true, and complete. NYSE Arca, Inc (Name of applicant) Martha Redding, Assistant By: (Printed Name and Title) Subscribed and swom before. (Notary Public) My Commission expires 6/18/20/8 New York County of 47 State of This page must always be completed in full with original, manual signature and notarization. Affix notary stamp or seal where applicable.

> THUNK BRACOCK MOTARY PLELIC, STATE OF NEW YORK CLULIFIED IN IGNOS COUNTY NO. OF BRECORDERS

SECURITIES AND EXCHANGE COMMISSION Washington, D.C.

Exhibits Accompanying Amendment
to

FORM 1 REGISTRATION STATEMENT
of
NYSE ARCA, INC.

August 2016

EXHIBIT F

ACCOMPANYING AMENDMENT TO FORM 1 REGISTRATION STATEMENT

OF

NYSE Arca, Inc.

August 2016

EXHIBIT F

A complete set of NYSE Arca, Inc.'s forms pertaining to application for membership, participation, or subscription, and application for approval as a person associated with a member, participant, or subscriber follows.

This information is publicly available on the Exchange's website at www.nyse.com.

Options Trading Permit Short Form Application

NYSE Arca Short Form OTP Membership Application and Agreement

To qualify for Short Form Options Trading Permit (OTP) Membership on NYSE Arca, the applicant must be an approved NYSE Arca Equities Trading Permit (ETP) Holder. Current ETP Holder applicants are eligible for expedited approval. To apply, please complete and submit this Short Form Application, Membership Agreement, and Clearing Letter of Consent to:

NYSE Arca, Inc.
Attn: Client Relationship Services
Email: crs@nyse.com

KEY PERSONNEL	15 - 18 18 18 18 18 18 18 18 18 18 18 18 18		
Please identify the key personnel who hold the below positions (or the individual whose responsibilities are the functional equivalent of such position, regardless of actual titles used by the Applicant Firm) and who will want to receive communications pertaining to our options markets.			
Chief Executive Officer ("CEO")			
Name:	CRD:		
Phone: Fa			
Email:			
Chief Financial Officer ("CFO")			
Name:	CRD:		
Phone: Fa	x:		
Email:			
Chief Compliance Officer ("CCO")			
Name:	CRD:		
Phone: Fa			
Email:			
Chief Operations Officer ("COO")			
Name:	CRD:		
Phone: Fa	х:		
Email:	<u> </u>		
Head of Options Clearing			
Name:	CRD:		
Phone: Fa	х:		
Email:	· 		
Head of Options Connectivity			
Name:	CRD:		
Phone: Fa	x:		
Email:			
Head of Options Trading			
Name:	CRD:		
Phone:Fa	x:		
Email:			

SECTION 1 - Short Form OTP Men	nbership Application			
Short Form Eligibility:				
Applicant is currently	y a member in good standing of	NYSE Arca Equities		
General Information				
Name of Applicant Broker-Dealer:				
Business Address:				
City:		State:	Zip Code:	
Oky.		Grane.	<u> </u>	
Business Phone:		Fax:		
Email:			_	
Web Address, if any:				
CRD Number:		_		
NYSE Arca Equities ETP ID:		<u> </u>		
Designated Examining Authority:		_		
Contact Information				
Contact Name:				
Job Title / Position			 -	
Phone:	 	Fax:		
Email:			-	
Type of Business to be Conducted	d With Options Trading Permi	t (Check all that apply)	
Market Maker*	Γ	Public Customer I	Business	
Floor Broker		Proprietary and/or	r Agency Trading	
Clearing Services		Order Service Fire	m	
Other				
*Please complete Application for Registration of Market Makers				
All applicants must complete the Registered Trader and Nominee Application available at https://www.nyse.com/publicdocs/nyse/markets/arca-options/NYSE_Arca_Options_Registered_Trader_and_Nominee_Application.pdf				

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SECTION 2 – Membership Agre	eement			
	oplicant Broker-Dealer agrees to abide by the Bylaws and Rules of NYSE Arca, Inc., as amended from time to time, and all circulars, notices, interpretations, directives or decisions adopted by NYSE Arca, Inc.			
pplicant Broker-Dealer authorizes any SRO, commodities exchange, governmental agency or similar entity to furnish NYSE Arca, upon its request, any information that such person may have concerning the ability, business activities, and reputation of Applicant Broker-Dealer or its associated persons, and releases such person or entity from any and I liability in furnishing such information. Applicant Broker-Dealer authorizes NYSE Arca to make available to any overnmental agency, SRO, commodities exchange or similar entity, any information it may have concerning the applicant Broker-Dealer or its associated persons, and releases NYSE Arca from any and all liability in furnishing such information.				
part of this application, including	edges its obligation to update any and all informa termination of membership with another SRO, wh bealer's DEA. It is understood that in that event, a	nich may cause a		
Applicant Broker-Dealer:				
Signature of Authorized Officer, Partner, Managing Member or Sole Proprietor:		Date:		
Print Name:		Title:		

SECTION 3 - Clearing Letter of Consent	
Notice of Consent - To be completed by Cl	earing OTP Holder of Application Broker-Dealer
	ng agency named below, a member of the National Securities Clearing orporation ("OCC"), and an approved OTP Holder of NYSE Arca, Inc.
	agrees to accept full financial responsibility for all transactions effected following Applicant Broker-Dealer with the clearing agency:
Applicant Broker-Dealer	CRD# and/or SEC File#
Rules and may be relied upon by NYSE Arca,	Intee, letter of authorization, or notice of consent pursuant to NYSE Arca Inc., the NSCC, the OCC, and their respective members. This Notice of as amended from time to time, and shall remain in effect until revoked
Clearing OTP Holder (Broker-Dealer Name)	-
Clearing OTP Holder (OCC Clearing #)	-
Clearing OTP Holder (NSCC Clearing #)	-
Signature of Authorized Officer, Partner or Managing Member of Clearing OTP Holder	Signature of Authorized Officer, Partner or Managing Member, or Sole Proprietor of OTP Holder
Print Name / Title	Print Name / Title
Date	Date

NYSE Arca OTP Short Form July 2016

Print Form

NYSE Arca Options

Floor Broker Letter of Authorization Revocation

То:	NYSE Arca Client Relationship Services [Department
From:	OTP Clearing Member	· · · · · · · · · · · · · · · · · · ·
Effective Date:	· · · · · · · · · · · · · · · · · · ·	(Close of Business)
	e informed that the Letter of Authorization issunce informed that the Letter of Authorization issunce informed that the Letter of Authorization issued effective on the above date.	ed for the following Floor Broker has
OTP Firm	Name	·
Floor Brok	ker Name	Symbol
Authorized	d Signature – Clearing Member	
Printed Na	ame	Title

Market Maker Letter of Guarantee Revocation

To:	NYSE Arca Client Re	lationship Services Departr	nent	
From:	Olas in Marilian			
	Clearing Member			
Effective Date:			(Close of Busine	<u>ess)</u>
	informed that the Letter of the control of the cont	of Guarantee issued for the e:	following Market Mal	ker has been
Firm Name	e			-
Market Ma	aker Name			
Market Ma	aker Symbol			
Authorized Clearing F	d Signature Firm	Date		
Print Name	<u>e</u>	Title		

Print Form

NYSE Arca Options

TERMINATION OF ORDER SENDING & CLEARING FIRM

То:	NYSE Arca Client Relationship Services Depa	rtment
From:	OTP Member Firm	
Re:		
	OTPID	Acronym(s)
Type of	OTP:	
Clear	ing Firm Order Sending Firm	·
Date of	Termination:	(Close of Business)
☐ Tem	porary Termination (1-120 days)	
	- Date of Return:	
☐ Perm	anent Termination	
	Authorized Signature of OTP Firm	Date

Checklist for Terminating an OTP Order Sending & Clearing Firm

- 1. OTP holders must notify the Exchange no later than one (1) business day in advance of the proposed termination date.
- 2. Temporary terminations cannot exceed 180 day s.

Print Form

NYSE Arca Options

TERMINATION OF MARKET MAKER

То:	NYSE Arca Options Client Relationship	Services Department	
From:			
	Clearing Member		
Date	of termination:	(Close of Business)	
	Temporary Termination (1 to 120 days) *		
	Date of Return: Permanent Termination**		
Ш	i ennanent i ennination		
Marke	et Maker:	Acronym(s):	-
OTP	Firm:	_	
(as de	Clearing Member will continue to accept full final efined in NYSE Arca Rule 6.36) made in the account have been if quidated a pted by the Exchange.	count of the above-specified Market Mak	ker, until such time
Autho	orized Signature of Clearing Member	Date	-
Print	Name	Title	_

* OTP holders(OTP) must notify the Exchange no later than one (1) business day in advance of the proposed temporary termination date. A temporary termination cannot exceed 180 days.

Trade activity in a market maker account that is subject to a Temporary Termination must be limited to "closing only" transactions. Closing only shall generally mean submission of orders for the purpose of closing positions or reducing risk. Trade activity in terminated accounts may be subject to regulatory review.

** A Letter of Guarantee Revocation is required to be filed with the NYSE Arca Client Relationship Services Department after all accounts have cleared.

NYSE Arca Options Floor Broker Letter of Authorization For FLEX Equity Options

This Letter of Authorization is made as	of , 20		
by	"Clearing Member"		
In respect of	"Floor Broker"		
	OTP Holder of NYSE Arca ("Exchange"), and Clearing Member is an oper of the Options Clearing ("Clearing Corpora tion"); and		
WHEREAS Floor Broker is registered with the Exchange as a Floor Broker pursuant to NYSE Arca Rule 6.44, and Floor Broker desires that options transactions effected by it on the Exchange be cleared throu the Clearing Corporation by Clearing Member, and			
WHEREAS Floor Broker has re Broker;	equested Clearing Member to issue a Letter of Authorization for Floor		
order to induce the Exchange to approve Broker, the Clearing Member hereby ago their respective members, that Clearing	eration of the premises and the agreements hereinafter set forth, and in the Clearing Member's issuance of a Letter of Authorization to Floor grees, for the benefit of Clearing Corporation and the Exchange, and Member shall accept full financial responsibility for the clearance of the Equity Options (as defined in NYSE Arca Rule 6.1(b)(6) and 5.32) of Clearing Member is given up.		
This Letter of Authorization shall remain in effect until a written notice or revocation has been filed with the Exchange and has been posted on the bulletin board of the Options Trading Floor of the Exchange. If such written notice has not been posted for a least one hour prior to the opening of trading on a particular business day on the options floor of the Exchange, such revocation shall not become effective until the close of trading on such day. A revocation shall not relieve Clearing Member of responsibility for transactions guaranteed prior to the effective time of such revocation.			
may not be revoked or terminated exce	etter of Authorization shall be filed with the Exchange. This agreement pt as stated above, and this agreement shall not be modified or ther heretofore or hereinafter executed) unless the approval of the		
WITNESS the due execution of	the Letter of Authorization as of the day first above written.		
Print name of Floor Broker	Print name of Clearing Member		
Authorized Signature of Floor Broker	Authorized Signature of Clearing Member		
Symbol	Title		

NYSE Arca Options Floor Broker's Letter of Authorization

This Letter of Authorization is made as of				•
the "Clearing Member" in res				the "OTP
Firm" on behalf of the "Floor	Broker"			
WHEREAS Floor Broker is an OTP Holder of Firm;	NYSE Arca ("I	Exchang	e") and non	ninee of an OTP
WHEREAS Clearing Member is an OTP Firm Corporation ("OCC");	of the Exchanç	ge and m	ember of C	options Clearing
WHEREAS Floor Broker is registered with the Arca Rule 6.44, and Floor Broker desires that options to cleared through the OCC by Clearing Member; and				
WHEREAS OTP Firm has requested Clearing Broker.	g Member to is	sue a Le	tter of Auth	orization for Floor
NOW, THEREFORE, in consideration of the p the Clearing Member hereby agrees, for the benefit of members, that Clearing Member shall accept full finan Member is given up:	OCC and the	Exchang	e, and their	respective
 □ For the clearance of all Exchange options tran □ For the clearance of all Flex Options transaction 				
*Check all that apply.				
This Letter of Authorization shall remain in effective with the Exchange. If such written notice has not been trading on a particular business day on the options flow become effective until the close of trading on such day responsibility for transactions guaranteed prior to the effective until the close of trading on such day responsibility for transactions guaranteed prior to the	n posted for a I or of the Excha y. A revocatior	east one inge, suc i shall no	hour prior ch revocation t relieve Cl	to the opening of on shall not
Executed counterparts of this Letter of Authori agreement may not be revoked or terminated except a modified or amended by any other instrument (whethe approval of the Exchange is noted thereon.	as stated above	e, and thi	is agreeme	nt shall not be
WITNESS the due execution of the Letter of A	authorization as	of the d	ay and yea	r above written.
Print Name of Authorized Signatory of Floor Broker's OTP Firm	Print Nam	ne of Cle	aring Meml	ber
Signature of Authorized Signatory of Floor Broker's OTP Firm	Print Nam Clearing		horized Sig	natory of
	Signature Member	of Author	orized Sign	atory of Clearing

MARKET MAKER LETTER OF GUARANTEE

Pursuant to NYSE Arca Rule 6 and 5.32

Dear Market Maker: You have represented to the undersigned Clearing M ember, a member of the Options Clearing Corporation, that you are a registered market maker pursuant to Rule 6.33 of the Rules of NYSE Arca. You have requested the undersigned Clearing Member to issue a Letter of Guarantee for you in order to enable you to meet the requirements of NYSE Arca Rule 6.36. In response to your request, the undersigned Clearing Member hereby agrees to accept full financial responsibility: ☐ For all Exchange options transactions [as defined in NYSE Arca Rule 6.1(a)(6)] made by ☐ For all Flex Options transactions [as defined in NYSE Arca Rule 5.32] made by you* *Check all that apply. This letter shall be deemed to be a Letter of Guarantee pursuant to NY SE Arca Rule 6.36 and may be relied upon by the NYSE Arca, the Options Clearing Corporation and their respective members. This Letter of Guarantee shall be subject to the NYSE Arca Rules as amended from time to time, and shall remain in effect until revoked in accordance with the NYSE Arca. Accepted and agreed to this _____ day of _____, 20 ____. Clearing Firm Name OTP Firm Name Clearing Member Representative (Please Print) Market Maker (Please Print) Authorized Signature of Clearing Member Authorized Signature of Market Maker Symbol of Market Maker Clearing member authorization for electronic collection of NYSE Arca invoices for the above symbol:

Name on OCC Account

OCC Account Number_____

FLOOR EMPLOYEE REGISTRATION REQUEST Incomplete applications will not be accepted. Applications will not be approved without proper identification, fingerprint clearance, U-4 and CRD registration. Accordingly, failure to respond accurately to the following questions will delay approval of your floor access application and may result in denial of floor access. **GENERAL INFORMATION** Applicant CRD#: Name of Applicant: Member Firm CRD#: Member Firm: Business Address: State: _____ Zip: ____ City: Member Firm Contact: _____ Title: Phone: Email: APPLICANT PERSONAL INFORMATION Home Address: State: ____ Zip: _____ City: Member Firm Contact: Title: Phone: Email: TYPE OF BUSINESS TO BE CONDUCTED Trade Support Clerk Floor Employee All individuals requesting access to the NYSE Arca Options Floor must register as ("FE") on WebCRD **APPLICATION CHECKLIST** A Form U-4 requesting ("FE") registration has been submitted to FINRA through WebCRD A Fingerprint Card has been submitted to FINRA APPLICANT ACKNOWLEDGEMENT I authorize NYSE Arca, Inc. and its affiliates to give any information they may have concerning me to any employer or prospective employer, any federal, state, or municipal agency, or any other SRO, and I release NYSE Arca, Inc., its affiliates and any person acting on their behalf from any and all liability of whatever nature by reason of furnishing such information. I swear or affirm that I have read and understand the items and instructions on this form and that my answers are true and complete to the best of my knowledge. Signature of Applicant: OTP FIRM ACKNOWLEDGEMENT Is authorized to enter into the NYSE Arca Options trading floor as I hereby certify that (Name of Applicant) referenced above, on behalf of this OTP Firm (Name of OTP Firm) Start Date: Authorized Signature: _____

OTP Request Form

This form should be used to request an Options Trading Permit ("OTP") and to assign that OTP to a nominee of an OTP Firm. This form designates an OTP Firm's nominee as an OTP Holder on behalf of that firm, and must be executed prior to the commencement of trading of that nominee. This form must be approved by NYSE Arca's Client Relationship Services Department. A separate form must be executed for each OTP Holder.

Please issue ("OTP Firm") (name of OTP Firm)	
Options Trading Permit(s), effective (open of business). (number of OTPs being requested) (effective date)	
(This)/(these) OTP(s) will be held in the name of	
("OTP Holder"), hereby established as an OTP Holder, until further notice. (name of nominee)	
☐ (This is a) / (these are) new or additional OTP(s) of the OTP Firm ☐ (This is an) / (these are) existing OTP(s) of the OTP Firm; this form is being executed to assign said OTP(s) to the above referenced OTP Holder.	e
Type of Business activity to be conducted with this/these OTP(s):	
☐ Lead Market Maker (LMM) ☐ Remote Market Maker (RMM) ☐ Floor Market Maker (FM	M)
☐ Clearing Services ☐ Proprietary and/or Agency Trading	
Floor Broker (FB) - If Floor Broker (FB) is checked, do you require a LiquidPoint Login? Yes No	
The OTP Firm acknowledges that it will be held liable for all Exchange obligations, including all obligations arising in connectransactions effected on NYSE Arca, all obligations owed to NYSE Arca or any subsidiary of NYSE Arca, the payment of al fees and charges, and all obligations accruing in the course of the OTP Firm's and the OTP Holder's NYSE Arca business.	
The OTP issued pursuant to NYSE Arca's acceptance of this form will be associated with the OTP Firm until terminated put termination provisions delineated in NYSE Arca Rule 2.22(a).	suant to the
Signature of OTP Holder:	
Telephone Number of OTP Holder: Email Address:	
Authorized Signature for OTP Firm:	
Print Name of Authorized Signatory:	
Telephone Number of Authorized Signatory: Email Address:	
Date:	
Clearing member authorization for electronic collection of NYSE Arca invoices for this OTP:	
Name of Clearing Firm	
OCC Account Number	

Registered Trader & Nominee Application

REGISTERED TRADERS Each Applicant is required to register employees, nominees and associated persons in accordance with NYSE Arca rules. Pursuant to these Rules. Applicants must complete the necessary documentation and submit such documentation in the manner prescribed in Rule 2.23. Individual traders of the Applicant must successfully pass any required examination and identify registration with the Exchange within any and all applicable categories on Form U4. Proof of examination requirements, fingerprint card submission, and Form U-4s should be submitted by the Applicant to the Central Registration Depository ("Web CRD®") for review by NYSE Arca. Registration categories include, but are not limited to, the following: MM - Market Maker Authorized Traders of the Applicant (Series 57 prerequisite) FB - Floor Broker (Series 57 prerequisite) APPLICANT FIRM INFORMATION CRD: Firm Name: Type of Business: Contact Name: Title: Email: Phone: REGISTERED TRADER / NOMINEE INFORMATION CRD: Name of Applicant: Date of Birth: Email: Phone: TYPE OF BUSINESS ACTIVITY TO BE CONDUCTED (Please check appropriate box below) Remote Market Maker (RMM) ☐ Lead Market Maker (LMM) ☐ Floor Broker (FB) ☐ Floor Market Maker (FMM) ☐ Market Maker Authorized Trader (MMAT) ☐ Office Nominee **APPLICATION CHECKLIST** ☐ A Form U-4 and Fingerprint card has been submitted directly to WebCRD© Individual has passed or been granted a waiver of the required examination AUTHORIZED ACKNOWLEDGEMENT OF APPLICANT FIRM Signature of Authorized Officer, Partner, Managing Date Member Title Print Name **APPLICANT AGREEMENT** The undersigned applicant represents that the information and statements contained herein, including the attachments hereto, and other information filed herewith, all of which are parts hereof, are current, true and complete CRD# Signature of Applicant Print Name Title

Revised January 2016 1 of 1

AP Form

NYSE Arca, Inc.

This Form is to be completed by persons required to be Approved Persons with the Exchange and for whom the required disclosure information is not available on Web CRD®.

Instructions

Prior to completing this form, the persons seeking Approved Person status ("Applicant") should be familiar with the NYSE Arca, Inc. and NYSE Arca Equities, Inc. (collectively, the "Exchange") Rules, particularly those relating to "Approved Persons," including but not limited to Arca Rule 1.1(c), 2.4, and 2.14, and Arca Equities Rule 1.1(d), 2.3, and 2.13.

- A copy of the completed Form must be retained by the Applicant and the member organization with which the Applicant is or will be associated ("Member Organization").
- To the extent necessary, provide additional information via a separate attachment referencing the section and question to which the additional information applies.
- The list of Approved Persons must be kept up-to-date with the Exchange and FINRA.
 - A new AP Form should be completed upon the occurrence of a change (e.g., a change in ownership, a new Approved Person)
 - o The elimination of an existing Approved Person should be provided to the Exchange and FINRA in writing (email is acceptable)
 - Notification of changes should be provided to the Exchange (<u>crs@nyse.com</u>) and FINRA (<u>Q&RNY@finra.org</u>) within 30 days

For Applicants associated with firms <u>seeking</u> NYSE Arca membership, please email a signed and completed copy of the AP Form to Client Relationship Services at <u>crs@nyse.com</u>.

Sectio	n I
1.	Full Name of the Applicant:
2.	Full name and Web CRD # of the Member Organization with which the Applicant is or will be associated:
	Member Organization:
	Web CRD#:
3.	Approved Person Status is requested pursuant to the rules of the Exchange because the Applicant is not an ETP/OTP Holder, nor an employee or an Allied Person of a ETP/OTP Firm, and who: is a director of an ETP/OTP Firm controls an ETP/OTP Firm beneficially owns, directly or indirectly, 5% or more of the outstanding equity securities of an ETP/OTP Firm has contributed 5% or more of the partnership capital
4.	Is the applicant subject to a Statutory Disqualification – as the term is defined in Section 3(a)(39) of the Securities Exchange Act of 1934?
	Yes No If an Applicant or any person associated with the Applicant, subsequently become subject to a Statutory Disqualification after initial approval, this information must promptly be communicated to the Exchange by sending notification to FINRA at Q&RNY@finra.org.

AP Form – June 2015 1

Section II					
1.	Address of Applicant's principal place of business (complete address of actual location):				
2.	Date and place of incorporation or jurisdiction under the laws of which Applicant was formed:				
3.	Indicate whether the Applicant has operated under any other names and identify all such names:				
Se	ction III				
Ву	signing below, the Applicant represents and acknowledges the following:				
The Applicant is not relying upon the Exchange to provide any information concerning or relating to the Member Organization and agrees that the Exchange has no responsibility to disclose to the Applicant any information concerning or relating to the Member Organization that it may have now or obtain at any future time. The Applicant agrees for itself, its personal representatives, successors and assigns that neither the Exchange, nor any investor, officer, trustee, agent, nor employee of said Exchange shall be liable to the Applicant with respect to the Applicant's investment or interest in the Member Organization or with respect to any repayment of any such investment or interest.					
It is understood that the statements made in connection with this Form will be relied upon by the Exchange and may be verified by investigation. The Applicant declares that all such statements are true, complete, current and accurate. It is also recognized that the Exchange reserves the right to request additional information.					
	Applicant undertakes and agrees to subject itself to the jurisdiction of the Exchange and to abide by such provisions of the Rules of Exchange as would at any time apply to an "Approved Person" as such term is defined in Arca Rule 1.1(c) and Arca Equities Rule (d).				
The Applicant hereby agrees to comply with the relevant provisions of the Securities Exchange Act of 1934, as amended, and the Rules and Regulations thereunder, and to furnish said Exchange with such information with respect to the Applicant's relationship and dealings with its affiliated member organization as the Exchange may require, to supply the Exchange with information relating to the existence of any "statutory disqualification" (as such term is defined in Section 3(a)(39) of the Securities Exchange Act of 1934, as amended) to which the Applicant or any person associated therewith may be subject, to permit examination by the Exchange or its designee of Applicant's books and records in order to verify the accuracy of the aforesaid information, and to subject itself to and abide by the Exchange' disciplinary authority.					
Applicant represents that except as is specifically indicated on this form or any supplement thereto, neither it nor any person associated therewith is subject to a statutory disqualification. (See Section 3(a)(39) of the Securities Exchange Act of 1934, as amended).					
full	plicant covenants and agrees that the foregoing statements, warranties, representations and undertakings will continue to apply with force and effect notwithstanding that the Member Organization may have changed its name or form of organization, or legal status that the member of the exchange in writing.				
Sig	nature: Date:				
-	nature: Date: (A Duly Authorized Executive Officer, Senior Partner, Managing Member or equivalent of the Applicant)				
Prii	nted Name:				
Titl	g:				

Lead Market Maker Application

EXPLANATION OF TERMS

For purposes of this application, the following terms shall have the following meanings:

Applicant – the Broker-Dealer applying as a registered Lead Market Maker or amending this form to become a registered Lead Market Maker.

Appointment - on a form or forms prescribed by the Exchange, a registered Market Maker must apply for a Primary Appointment, having the obligations hereunder, and of Rule 6.37, in one or more option classes.

Associated Person - a person who is a partner, officer, director, member of a LLC, trustee of a Business Trust, or employee of an OTP Firm or any person directly or indirectly controlling, controlled by or under common control with an OTP Firm.

Control – as defined on Form-BD, the power, directly or indirectly, to direct the management or policies of a company, whether through ownership of securities, by contract or otherwise. Any person that (1) is a director, general partner or officer exercising executive responsibility (or having similar status or functions); (2) directly or indirectly has the right to vote 25% or more of a class of a voting security or has the power to sell or direct the sale of 25% or more of a class of voting securities; or (3) in the case of a partnership, has the right to receive upon dissolution, or has contributed, 25% or more of the capital, is presumed to control that company.

Central Registration Depository System ("Web CRD®") – a centralized electronic registration system maintained by FINRA which provides information on registered representatives and principals for members of participant organizations. This database contains employment history, exam scores, licensing information, disciplinary actions, fingerprint results, and other related registration information. NYSE Arca, Inc. is a participant of this system.

Designated Examining Authority ("DEA") – the SEC will designate one Self-Regulatory Organization ("SRO") to be a Broker-Dealer's examining authority, when the Broker-Dealer is a Member or OTP Firm of more than one SRO. Every Broker-Dealer is assigned a DEA, who will examine the Broker-Dealer for compliance with financial responsibility rules. The SEC will make the DEA assignment based on the SRO examination program and the Broker-Dealer's primary business location.

Direct Owners/Executive Officers – refers to (1) a director, general partner or officer exercising executive responsibility (or having similar status or function); or (2) directly or indirectly has the right to vote 5% or more of a class of voting security or has the power to sell or direct the sale of 5% or more of a class of voting securities; (3) is entitled to receive 5% or more of the net profits; (4) in the case of a partnership, all general partners and those limited and special partners that have the right to receive upon dissolution or have contributed, 5% or more of the capital; or (5) in the case of a LLC, those members that have the right to receive upon dissolution, or have contributed, 5% or more of the LLC's capital, and if managed by elected managers, all elected managers.

Eligible Issues - an LMM may be allocated any one or more of the options issues opened for trading at the Exchange.

Financial Arrangement – (1) the direct financing of an OTP Holder's dealings upon the Exchange, (2) any direct equity investment or profit sharing arrangement; or (3) any consideration over the amount of \$5,000.00 including, but not limited to, gifts, loans, annual salaries or bonuses.

Lead Market Maker ("LMM") – an individual or entity that has been deemed qualified by the Exchange for the purpose of making transactions on the Exchange in accordance with the provisions of Rule 6.82. Each LMM or nominee thereof must be registered with the Exchange as a Market Maker. Any OTP Holder or OTP Firm registered as a Market Maker with the Exchange is eligible to be qualified as an LMM.

Lead Market Maker OTP - an approved Lead Market Maker with NYSE Arca, Inc. eligible to act as an LMM in options classes.

Market Maker ("MM") - an OTP Holder approved by the Corporation to act as a Market Maker pursuant to NYSE Arca Rule 6.

Market Maker Authorized Trader ("MMAT") – an authorized individual who performs market-making activities pursuant to NYSE Arca Rule 6, on behalf of a OTP Firm or OTP Holder registered as a Market Maker or Lead Market Maker.

NYSE Arca, Inc. ("NYSE Arca", the "Corporation", or the "Exchange") – a Delaware corporation as described in the Corporation's Certificate of Incorporation and Bylaws. NYSE Arca is a national securities exchange as that term is defined by Section 6 of the Securities Exchange Act of 1934, as amended.

Quotations – OTP Holders who are registered as Lead Market Makers are required by rules 6.37 and 6.82 to generate and automatically update two-sided market quotations throughout the trading day in each of their appointed series for 90% of the time the Exchange is open for trading in each series.

Self-Regulatory Organization ("SRO") - each national securities exchange or national securities association is an SRO. Each SRO must have rules that provide for the expulsion, suspension and other discipline of member Broker-Dealers for conduct inconsistent with just and equitable principles of trade.

APPLICATION PROCESS

Filing Requirements:

Prior to submitting the <u>Application to become a Lead Market Maker</u>, an applicant Broker-Dealer must have completed the Options Trading Permit ("OTP") application, identifying "Market Making" as a business to be conducted on NYSE Arca, Inc. A firm will not be eligible for approval as a Lead Market Maker until after their OTP application, with this indication, is approved.

Checklist:

Applicant OTP must complete and submit all materials as required in the Application Checklist (page 3) to crs@nyse.com.

If you have questions regarding the application, you may direct them to Client Relationship Services: Email: crs@nyse.com; Phone: 212-896-2830, Option 5.

Application Process:

- Following submission of the <u>Lead Market Maker Application</u>, and supporting documents, NYSE Arca will review the
 application for completeness prior to submission to FINRA for review.
- If review of Statutory Disqualification Disclosure information and/or a background investigation indicates that the applicant Broker-Dealer has an associated person(s) with a possible statutory disqualification, NYSE Arca or FINRA on behalf of NYSE Arca, will contact the representative of the applicant Broker-Dealer to discuss the statutory disqualification process.
- If it appears that the Applicant has outstanding debt, civil judgment actions and/or regulatory disciplinary actions, the applicant Broker-Dealer will be contacted by NYSE Arca or FINRA on behalf of NYSE Arca for further information.
- NYSE Arca will notify the Applicant in writing of their decision.
- In the event an applicant Broker-Dealer is disapproved by NYSE Arca, the applicant Broker-Dealer has an opportunity to be heard upon the specific grounds for the disapproval, in accordance with the provisions of NYSE Arca Rule 10.14. A disapproved applicant desiring an opportunity to be heard shall file a written application with the Secretary of the Corporation within thirty (30) calendar days after such action has been taken.

APPLICATION CHECKLIST

CHECKLIST FOR BROKER-DEALERS TO BECOME A LEAD MARKET MAKER

- Approved Options Trading Permit (OTP) Application.
- Application for Lead Market Maker, All Sections.
- Copy of the Applicant's Written Supervisory Procedures ("WSPs") for Market Making on NYSE Arca, Inc.
- Financial Documentation
 - Four (4) Most Recent FOCUS Reports¹ and the Most Recent Audited Financial Statements, if applicable
 - Most Recent Balance Sheet and Capital Computation
 - Six Month Profit/Loss Projection
 - Subordination Agreements, if applicable²
- Organization Documents: Articles of Incorporation and Bylaws; Partnership Agreement; Limited Liability Company ("LLC") Agreements; Operating Agreement; or similar documentation
- All examination reports and corresponding responses from the Applicant Broker-Dealer for the previous two (2) years.

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¹ Applicants must demonstrate that they have current net capital of 140% of their minimum net capital requirement or \$20,000 in excess of their minimum dollar net capital requirement, whichever is greater. If the Broker-Dealer has reported net losses for the period reviewed, the Firm's financial statements must demonstrate that its excess net capital can withstand six (6) consecutive months of average losses. Applicant Broker-Dealers that do not have the requested financial information available are required to submit Pro Forma Financial statements for the most recent six (6) months or since inception, whichever is less. ² Required for NYSE Arca-DEA Broker-Dealers only

SECTION 1 – ORGANIZATIONAL PROFILE							
Date:	SEC#:	CRD #:					
	☐ Application	☐ Amendment					
GENERAL INFORMATION							
Name of Applicant Broker-Dealer:							
Business Address:			·				
	City:	State:	Zip Code:				
Business Phone:		Fax:					
Contact Name:		Title:					
Phone:		Email:					
OTP APPROVAL STATUS							
Applicant organization is currently an approved Options Trading Permit Holder and Market Maker with NYSE Arca. * * All Lead Market Maker applicants must be approved OTP Holders and Market Makers with NYSE Arca.							
NET CAPITAL							
Amount:	As Of Date	FOCUS Report Lir	ne Item*				
Source of Net Capital (chec	Source of Net Capital (check all that apply):						
☐ Long Proprietary Positi	ons	vidends/Commissions	Secured Demand Note				
☐ Cash	☐ Subordina	ted Loan	Clearing / Good Fait Deposits				
☐ Other							
*Submitting the firm's most this section	recent Quarterly FOCUS r	report and highlighting the Net C	apital is an alternative to completing				
SECURITIES							
Estimate the number of issues in which the Applicant intends to become registered as a LMM:							
OTHER BUSINESS ACTIVITIE	S						
Check all that apply:							
☐ Investment Banking		☐ Public Sec	urities Business				
☐ Proprietary Trading		☐ Equities M	arket Maker				
Other		•					

SECTION 2 - INFORMATION FOR LEAD MARKET MAKERS

LMMs are subject to all applicable State and Federal Laws, and the rules promulgated thereunder, as well as the Rules of NYSE Arca. To ensure compliance, please consult your compliance department and/or legal counsel to determine the rules that are applicable, including, but not limited to, those referenced below. In particular, you should determine whether Rule 6.82 applies to your firm, including reporting requirements.

NYSE Arca Rule 6.82(b): Qualification of Lead Market Makers

- (1) Qualification of LMMs. The qualification of LMMs shall be conducted by the Exchange. The LMM Qualification Process is as follows:
- (A) Applications for qualification as an LMM shall be general and shall not specify a particular option issue or issues. Applicants for qualification as an LMM may present any matter they wish the Exchange to consider in conjunction with its decision. The Exchange may require that presentation to be solely or partially in writing, and may require the submission of additional information from an applicant, OTP Holder or OTP Firm, or any person associated with an OTP Holder or OTP Firm.
- (B) The Exchange may also specify one or more conditions on the applicant in respect to any representations made in the application process, including but not limited to representations regarding capital operations, personnel or technical resources.

NYSE Arca Rule 6.82(c): Obligations of Lead Market Makers

Each LMM must meet the following obligations:

- (1) Assure that disseminated market quotations are accurate;
- (2) Honor guaranteed markets, including markets required by Rule 6.86 and any better markets pledged during the allocation process;
- (3) Generate and automatically update two-sided market quotations with size in all appointed series in accordance with Rule 6.37B (b) through the LMMs own proprietary autoquoting system;
- (4) Fulfill general Market Maker obligations under Rule 6.37 and 6.37A;
- (5) Be accessible throughout every business day. An LMM shall promptly notify a Trading Official if such LMM shall not be accessible at anytime during the day. The Exchange may designate an approved LMM to act as a back-up LMM in the event such appointed LMM is not accessible;
- (6) With respect to trading as a Market Maker, effect trades that have a high degree of correlation with the overall pattern of trading for each series in the option issues involved;
- (7) Reserved
- (8) Reserved
- (9) Promote the Exchange as a marketplace by assisting in meeting and educating market participants and taking the time for travel related thereto;
- (10) Maintain communications with member firms in order to respond to suggestions and complaints;
- (11) Respond to competition by offering competitive markets and competitively-priced services;
- (12) Maintain a cash or liquid asset position of at least \$1,000,000. In the event that two or more LMMs are associated with each other and deal for the same LMM account, this requirement will apply to such LMMs collectively, rather than to each LMM individually;
- (13) Fully satisfy conditions of appointments pursuant to Subsection (b)(1)(B) of this Rule;
- (14) Promptly inform the Exchange of any material change in financial or operational condition or in personnel.

SECTION 3 - REQUIRED INFORMATION & AKNOWLEDGEMENT

The undersigned, applying for registration as a Lead Market Maker, accepts full responsibility for having knowledge of and adhering to all applicable rules and regulations governing the trading facility of NYSE Arca, including its subsidiaries and affiliates. The undersigned acknowledges the following requirements:

- Maintain the net capital requirements as prescribed by NYSE Arca Rule 4 and SEC Rule 15c3-1, whichever is greater. The
 net capital requirements apply only to the registered Lead Market Maker firm rather than to each MMAT individually.
- 2. Maintain a cash or liquid asset position of at least \$1,000,000. In the event that two or more LMMs are associated with each other and deal for the same LMM account, this requirement will apply to such LMMs collectively, rather than to each LMM individually.
- The LMM's clearing firm will provide daily equity information to FINRA, acting as agent for NYSE Arca, for LMM cash or liquid asset position review.
- Provide monthly financial statements consisting of FOCUS Form X-17A-5 to FINRA, acting as agent for NYSE Arca, for Market Maker capital compliance review.
- 5. Provide detailed financial reports and such other operational reports to NYSE Arca or FINRA, acting as agent for NYSE Arca as may be required.
- 6. Disclose promptly any material change in financial or operational condition, or in personnel in accordance with the rules and procedures of NYSE Arca.
- 7. Establish, maintain, and enforce written procedures to supervise the business in which it engages and to supervise the activities of its associated persons that are reasonably designed to ensure compliance with applicable federal securities laws and regulations and NYSE Arca's rules. Such written procedures shall at all times be available for inspection by staff or agents of NYSE Arca.

AUTHORIZED ACKNOWLEDGEMENT OF THE CONTENTS HEREIN					
The undersigned attests that the contents submitted on behalf of the Applicant are complete and agrees to update information as required. Further, the Applicant will abide by all rules of the Exchange, as may be amended from time to time.					
Signature of Authorized Officer, Partner, Managing Member, or Sole Proprietor	Date				
Print Name of Authorized Officer, Partner, Managing Member, or Sole Proprietor	Title				
AUTHORIZED ACKNOWLEDGEMENT OF THE APPLICANT'S CLEARING FIRM					
Signature of Authorized Clearing Firm Representative	Date				
Print Name	Title				
Clearing Firm Name	Clearing No.				

NYSE Arca OTP LMM Application May 2016 6

Options Trading Permit Application

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APPLICATION PROCESS

Filing Requirements

Prior to submitting the <u>Application for Options Trading Permit ("OTP")</u>, an Applicant Broker-Dealer must file a Uniform Application for Broker-Dealer Registration (Form-BD) with the Securities and Exchange Commission and register with the FINRA Central Registration Depository ("Web CRD®").

Checklist

Applicant Broker-Dealer must complete and submit all applicable materials addressed in the Application Checklist (page 4) to:

crs@nyse.com

Note: All application materials sent to NYSE Arca will be reviewed by NYSE Arca's Client Relationship Services Department for completeness. The applications are submitted to FINRA who performs the application approval recommendation. All applications are deemed confidential and are handled in a secure environment. CRS or FINRA may request applicants to submit documentation in addition to what is listed in the Application Checklist during the application review process, pursuant to NYSE Arca Rule 2.4. If you have questions on completing the application, you may direct them to: Client Relationship Services: Email: crs@nyse.com or (212) 896-2830 option 5.

Application Process

- Following submission of the Application for Options Trading Permit and supporting documents to NYSE Arca, Inc. ("NYSE Arca"),
 the application will be reviewed for accuracy and regulatory or other disclosures. NYSE Arca will submit the application to FINRA for
 overall review and approval recommendation; NYSE Arca Compliance and Regulation complete the final review and approval.
- If review of Statutory Disqualification Disclosure information and/or a background investigation indicates that the Applicant has an
 associated person(s) with a possible statutory disqualification, NYSE Arca will contact the representative of the Applicant to discuss
 the statutory disqualification process.
- If it appears that the Applicant has outstanding debt, civil judgment actions and/or regulatory disciplinary actions, the Applicant will be contacted by NYSE Arca for further information.
- Applicants who have completed and returned all documents without indication of a statutory disqualification, outstanding debt, civil
 judgment actions and/or regulatory disciplinary actions will be presented to NYSE Arca for approval or disapproval without delay.
 NYSE Arca shall post the name of the Applicant Broker-Dealer and its proposed Nominee for a period of three (3) business days in
 the NYSE Arca Weekly Bulletin.
 - Applicants will be subject to disciplinary action if false or misleading answers are given pursuant to the Application for Options Trading Permit
- All individuals required to be registered with NYSE Arca, pursuant to the Rules, shall file documentation with the Exchange in the manner prescribed in NYSE Arca Rule 2.23 requesting such registration. NYSE Arca does not accept fingerprint cards. Fingerprint cards must be submitted directly to FINRA within 30 days of filing the Form U4. The fingerprint cards must be cleared by the FBI for individuals who seek to register with NYSE Arca or be approved by NYSE Arca. Firms may request FINRA-approved fingerprint cards through the Gateway Call Center at: (301) 590-6500. Fingerprint cards should be sent directly to: For Regular U.S. Mail: FINRA, Registration and Disclosure Department, P.O. Box 9495, Gaithersburg, MD 20898-9495. P.O. Boxes will not accept courier or overnight deliveries. For Express/Overnight Mail Delivery: FINRA, Registration and Disclosure Department, 9509 Key West Avenue, Rockville, MD 20850. If a phone number is required for the recipient, provide: (301) 590-6500. Your firm should receive the FBI search results in the "Fingerprint Status Received from FBI Notice Queue" within three business days after the card is sent to the FBI. Additional information regarding the submission of fingerprints to Web CRD may be obtained on the FINRA Web site: https://firms.finra.org/webcrd.
- NYSE Arca will promptly notify the Applicant, in writing, of their membership decision.
- An OTP must be activated within six months of approval by NYSE Arca. Applicant Broker-Dealers that have been approved by
 NYSE Arca are not considered active OTP Firms until an OTP has been placed in the name of a Nominee. Nominees must be
 approved by NYSE Arca before becoming an OTP Holder on behalf of an OTP Firm. OTP Firms that are off-floor trading firms or
 provide clearing services on NYSE Arca and are not conducting market maker or floor broker activities are required to designate an
 "Office Nominee" as its OTP Holder. This Office Nominee must be a Direct Owner/Executive Officer appearing on Schedule A of the
 OTP Firm's Form BD.
- In the event an Applicant is disapproved by NYSE Arca, the Applicant has an opportunity to be heard upon the specific grounds for
 the disapproval, in accordance with the provisions of NYSE Arca Rule 10.14. A disapproved applicant desiring to be heard must,
 within thirty (30) calendar days of the date upon which the Corporation's decision was mailed to the applicant, file a petition in
 accordance with the provisions of NYSE Arca Rule 10.14.

APPLICATION CHECKLIST & FEES

CHECKLIST FOR NON-NYSE Arca DEA BROKER-DEALER APPLICANTS

- Application for Options Trading Permit
 - Section 1 through 7 MANDATORY
 - Section 8 only if you are not self-clearing
- Form BD, including Schedules & Disclosure Reporting pages must be up to date and accurate on FINRA's Web CRD®.
- A Form U-4 and Fingerprint cards for the following individuals needs to be submitted directly to the FINRA, if not currently available on Web CRD®:
 - Direct/Indirect Owners, Allied Persons, and Approved Persons as listed on Form BD Schedules A & B
 - · Designated supervisors and principals
 - All Authorized Traders
- Financial Documentation
 - Four (4) Most Recent FOCUS Reports¹ and the Most Recent Audited Financial Statements, if applicable
 - Most Recent Balance Sheet and Capital Computation
 - Six Month Profit/Loss Projection
- All examination reports and corresponding responses from the Applicant Broker-Dealer for the last two exam reports
- Copy of Written Supervisory Procedures², Anti-Money Laundering Procedures, and Insider Trading Act Procedures (if separate)
- Organizational Documents: Articles of Incorporation and Bylaws; Partnership Agreement; Limited Liability Company ("LLC")
 Agreements; Operating Agreement; or similar documentation

CHECKLIST FOR NYSE Arca DEA BROKER-DEALER APPLICANTS

- Application for Options Trading Permit
 - Section 1 through 7, and 9 MANDATORY
 - Section 8 only if you are not self-clearing
- Form BD, including Schedules & Disclosure Reporting pages must be up to date and accurate on FINRA's Web CRD®.
- A Form U-4 and Fingerprint cards for the following individuals needs to be submitted directly to the FINRA, if not currently available on Web CRD®¹.
 - Direct/Indirect Owners, Allied Persons, and Approved Persons as listed on Form BD Schedules A & B
 - · Designated supervisors and principals
 - All Authorized Traders
- ☐ Financial Documentation
 - Four (4) Most Recent FOCUS Reports² and the Most Recent Audited Financial Statements, if applicable
 - Most Recent Balance Sheet and Capital Computation
 - Six Month Profit/Loss Projection
 - Subordination Agreements, if applicable
- Proprietary Accounts of Introducing Broker-Dealers (PAIB) Agreements, if applicable
- Organization Documents: Articles of Incorporation and Bylaws; Partnership Agreement; Limited Liability Company ("LLC")
 Agreements; Operating Agreement; or similar documentation
- All examination reports and corresponding responses from the Applicant Broker-Dealer for the last two exam reports
- Copy of Written Supervisory Procedures³, Anti-Money Laundering Procedures, and Insider Trading Act Procedures (if separate)

Note: For a list of all fees, please review the "Schedule of Fees and Charges for Exchange Services" found at https://www.nyse.com/markets/fees

Applicants must demonstrate that they have current net capital of 140% of their minimum net capital requirement or \$20,000 in excess of their minimum dollar net capital requirement, whichever is greater. If the Broker-Dealer has reported net losses for the period reviewed, the Firm's financial statements must demonstrate that its excess net capital can withstand six (6) consecutive months of average losses. Applicant Broker-Dealers that do not have the requested financial information available are required to submit Pro Forma Financial statements reflecting the Balance Sheet and Profit & Loss Statement detail for each month for the most recent six (6) months or since inception,

whichever is less.

Market Maker applicants must include, but are not limited to, the following NYSE Arca Option Rules: 6.32 – 6.41 (Market Makers), 6.82, 6.84 & 6.85 (Lead Market Makers), 6.83 (Limitations on Dealings of Lead Market Makers/Information Barners), 11.3 (Prevention of the Misuse of Material, Nonpublic Information), 11.18 (Supervision), and 11.19 (Anti-Money Laundering Compliance Program).

EXPLANATION OF TERMS

For purposes of this application, the following terms shall have the following meanings:

Applicant - the Broker-Dealer organization applying for an Options Trading Permit or amending this form.

Associated Person - a person who is a partner, officer, director, member of a LLC, trustee of a Business Trust, or employee of an OTP Holder or any person directly or indirectly controlling, controlled by or under common control with an OTP Holder.

Authorized Trader ("AT") – an individual who may submit orders to the Exchange on behalf of his or her OTP Firm or Sponsored Participant.

Central Registration Depository System ("Web CRD®") – A centralized electronic registration system maintained by FINRA which provides information on registered representatives and principals for members of participant organizations. This database contains employment history, exam scores, licensing information, disciplinary actions, fingerprint results, and other related registration information. NYSE Arca, Inc. is a participant of this system.

Clearing Member – an OTP Firm which has been admitted to membership in the Options Clearing Corporation ("OCC") pursuant to the provisions of the rules of the OCC. A Broker-Dealer who receives and executes customers' instructions, prepares trade confirmations, sends the money related to the trades, arranges for the physical movement of securities, and shares responsibility with an introducing broker-dealer for compliance with regulatory requirements.

Control – (as defined on Form-BD) the power, directly or indirectly, to direct the management or policies of a company, whether through ownership of securities, by contract or otherwise. Any person that (1) is a director, general partner or officer exercising executive responsibility (or having similar status or functions); (2) directly or indirectly has the right to vote 25% or more of a class of a voting security or has the power to sell or direct the sale of 25% or more of a class of voting securities; or (3) in the case of a partnership, has the right to receive upon dissolution, or has contributed, 25% or more of the capital, is presumed to control that company.

Designated Examining Authority ("DEA") – the SEC will designate one Self-Regulatory Organization ("SRO") to be a Broker-Dealer's examining authority, when the Broker-Dealer is a Member or OTP Holder of more than one SRO. Every Broker-Dealer is assigned a DEA, who will examine the Broker-Dealer for compliance with financial responsibility rules.

Designated Supervisor – refers to any person that is a partner, director, or officer exercising executive responsibility (or having similar status or functions) for supervising registered employees.

Direct Owners/Executive Officers – Allied Persons and Approved Persons, as those terms are defined by NYSE Arca Rules 1.1(b) and 1.1(c), respectively, and generally refer to (1) a director, general partner or officer exercising executive responsibility (or having similar status or function); or (2) directly or indirectly has the right to vote 5% or more of a class of voting security or has the power to sell or direct the sale of 5% or more of a class of voting securities; (3) is entitled to receive 5% or more of the net profits; (4) in the case of a partnership, all general partners and those limited and special partners that have the right to receive upon dissolution or have contributed, 5% or more of the capital; or (5) in the case of a LLC, those members that have the right to receive upon dissolution, or have contributed, 5% or more of the LLC's capital, and if managed by elected managers, all elected managers.

Financial Arrangement – (1) the direct financing of an OTP Holder's dealings upon the Exchange; (2) any direct equity investment or profit sharing arrangement; or (3) any consideration over the amount of \$5,000.00 including, but not limited to, gifts, loans, annual salaries or bonuses.

Firm Proprietary and/or Agency Trading – an OTP Firm that engages in off-floor trading that is unrelated to the performance of that OTP Firm's registered market maker or floor broker functions.

Market Maker – an OTP Firm or OTP Holder that acts as a Market Maker pursuant to Rule 6.32A and submits quotes electronically and makes transactions as a dealer-specialist through the facilities of the Exchange from on the trading floor or remotely from off the trading floor.

Market Maker Authorized Trader ("MMAT") – an Authorized Trader who performs market making activities pursuant to Rules 6 and 6A on behalf of an OTP Firm or OTP Holder registered as a Market Maker. To be approved as an MMAT, a person must demonstrate knowledge of the Rules of the Exchange by passing an examination prescribed by the Exchange. MMATs may be officers, partners, employees, or associated persons of OTP Firms that are registered with the Exchange as Market Maker.

EXPLANATION OF TERMS (CONTINUED)

Nominee – an individual who is authorized by an OTP Firm, in accordance with NYSE Arca Rule 2.4, to conduct business on the trading facilities of NYSE Arca and to represent such OTP Firm in all matters relating to the Exchange. A Nominee shall agree to be bound by the Bylaws and Rules of NYSE Arca, and by all applicable rules and regulations of the Securities Exchange Commission.

NYSE Arca, Inc. ("NYSE Arca", the "Exchange", or the "Corporation") – a Delaware corporation as described in the Corporation's Certificate of Incorporation and Bylaws. NYSE Arca is a national securities exchange as that term is defined by Section 6 of the Securities Exchange Act of 1934, as amended. NYSE Arca, Inc. is also a Self-Regulatory Organization.

OTP – an Options Trading Permit issued by the Corporation for effecting approved securities transactions on the Corporation's trading facilities. An OTP may be issued to a Sole Proprietor, Partnership, Corporation, LLC or other organization which is a registered Broker or Dealer, pursuant to Section 15 of the Securities Exchange Act of 1934, as amended, and which has been approved by the Corporation.

OTP Firm – a sole proprietor, partnership, corporation, limited liability company or other organization in good standing who holds an OTP or upon whom an individual OTP Holder has conferred trading privileges on the Corporation's trading facilities. An OTP Firm shall agree to be bound by the Certificate of Incorporation, Bylaws and Rules of NYSE Arca, and by all applicable rules and regulations of the Securities and Exchange Commission.

OTP Holder – a natural person who has been issued an OTP, or has been named as a Nominee of an OTP Firm in accordance with NYSE Arca Rules.

Primary Business – refers to greater than 50% of the OTP Holder's business.

Self-Regulatory Organization ("SRO") - each exchange or national securities association is an SRO. Each SRO must have rules that provide for the expulsion, suspension and other discipline of member Broker-Dealers for violation of the SRO's rules

KEY PERSONNEL		
Please identify the key personnel who hold the below positions (or the individual whose responsibilities are the functional equivalent of such position, regardless of actual titles used by the Applicant Firm) and who will want to receive communications pertaining to our options markets.		
Chief Executive Officer ("C	EO")	
Name:	*****	CRD:
Phone:	Fax:	
Email:		-
Chief Financial Officer ("CF	0")	
Name:		CRD:
Phone:	Fax:	
Email:		-
Chief Compliance Officer (CCO")	· · · · · · · · · · · · · · · · · · ·
Name:		CRD:
Phone:	Fax:	
Email:		_
Chief Operations Officer ("	200")	
Name:		CRD:
Phone:	Fax:	
Email:		-
Head of Options Clearing		
Name:		CRD:
Phone:		
Email:		_
Head of Options Connectiv	ity	
Name:		CRD:
Phone:	Fax:	
Email:		_
Head of Options Trading		,
Name:		CRD:
Phone:	Fax:	
Email:		-

SECTION 1 – ORGANIZATIONAL PROFILE					
Date:		SEC #: CRD #:		<u></u>	
			Application	□ A	mendment
GENER	RAL INFORMATION				
Name o	f Applicant Broker-Dealer:				
Busines	s Address:				
		City	y:	St	ate: Zip Code:
Busines	ss Phone:			Fax	:
Contact	Name:			Title	:
Phone:			·		:
TVDF	OF ORGANIZATION				
_	☐ Corporation		imited Liability Company		Partnership
	<u> </u>				PERMIT (Check all that apply)
ITPE	OF BUSINESS TO BE	CONDU	CLED WITH OF HONS IF	ADING	РЕКІНІ (Glieck all that арріу)
<u>ן</u> כ	☐ Market Maker	□F	loor Broker		☐ Public Customer Business
(☐ Clearing Services	P	Proprietary and/or Agency Trac	ling	☐ Other
OTHER	R BUSINESS ACTIVITI	FS COI	NDUCTED BY APPLICAN	T BROK	ER_DEALER (Check all that apply)
	☐ Market Maker		Floor Broker	. Divo	☐ Public Customer Business
ָ '	-	_		lia.a	Other
	Clearing Services		Proprietary and/or Agency Trac		
			ANIZATION MEMBERSHIP		
	☐ American Stock Exchange (AMEX)			Boston Stock Exchange (BSE)	
☐ Chicago Board Options Exchange (CBOE) ☐ Chicago Stock Exchange (CHX)		Chicago Stock Exchange (CHX)			
☐ National Stock Exchange (NSX) ☐ International Securitie		International Securities Exchange (ISE)			
(☐ Financial Industry Regulatory Authority, Inc. (FINRA)			New York Stock Exchange (NYSE)	
0	☐ Philadelphia Stock Exchange (PHLX) ☐ BATS (BATS)		BATS (BATS)		
(☐ Nasdaq Stock Market (NQX)				
APPLI	CANT'S DESIGNATED	EXAM	INING AUTHORITY ("DEA	۱")	
	☐ NYSE Arca, Inc. (NYSE Arca / NYSE Arca Options) ☐ Other				
	Applicants for whom NYSE	E Arca wi	ill be the DEA must also comp	lete Sec	ion 9 of this application

SECTION 2 - MEMBERSHIP AGREEMENT

Applicant Broker-Dealer agrees to abide by the Bylaws and Rules of NYSE Arca, Inc., as amended from time to time, and all circulars, notices, interpretations, directives or decisions adopted by NYSE Arca, Inc.

Applicant Broker-Dealer authorizes any SRO, commodities exchange, governmental agency or similar entity to furnish to NYSE Arca, upon its request, any information that such person may have concerning the ability, business activities, and reputation of Applicant Broker-Dealer or its associated persons, and releases such person or entity from any and all liability in furnishing such information. Applicant Broker-Dealer authorizes NYSE Arca to make available to any governmental agency, SRO, commodities exchange or similar entity, any information it may have concerning the Applicant Broker-Dealer or its associated persons, and releases NYSE Arca from any and all liability in furnishing such information.

Applicant Broker-Dealer acknowledges its obligation to update any and all information contained in any part of this application, including termination of membership with another SRO, which may cause a change in the Applicant Broker-Dealer's DEA. It is understood that in that event, additional information may be required by NYSE Arca

Applicant Broker-Dealer:	CRD#:
Signature of Authorized Officer, Partner, Managing Member or Sole Proprietor:	Date:
Print Name:	Title:

SECTION 3 – FINANCIAL DISCLOSURE
FINANCIAL STATEMENT
Copies of the required financial items as noted on the checklist including: the four (4) most recent FOCUS Reports ³ , most recent Audited Financial Statements, and examination reports and corresponding responses.
SOURCE OF CAPITAL
Explain the source of Applicant Broker-Dealer's Capital
PROPRIETARY ACCOUNTS OF INTRODUCING BROKER-DEALERS (PAIB)
Do you hold a Proprietary Account as an Introducing Broker-Dealer (PAIB)
*If Yes: An introducing Broker-Dealer must notify its DEA in writing when it has entered into a PAIB Agreement with a clearing Broker-Dealer regarding the net capital treatment of assets held in proprietary accounts. Assets (cash and securities) held in trading accounts without a PAIB Agreement are considered to be non-allowable in the computation of net capital under SEC Rule 15c3-1. If NYSE Arca will be your DEA, please enclose a copy of all PAIB Agreements you have entered into with a clearing broker-dealer.
SUBORDINATED LOANS
Have any subordinated loans been made to Applicant Broker-Dealer? Yes (Explain below) No
FINANCIAL OR CONTROLLING INTERESTS
Does the Applicant Broker-Dealer have a financial or controlling (as defined in Form-BD) interest (through direct or indirect stock or bond ownership, through outstanding loans, or otherwise) in any organization engaged in a securities, financial or related business?
☐ Yes (Explain below) ☐ No
FINANCIAL ARRANGEMENT
Does the Applicant Broker-Dealer have a financial arrangement with any other Broker-Dealer?
☐ Yes (Explain below) ☐ No
Type of Arrangement: Direct Equity Investment Profit Sharing Direct Financing Other
Terms of Arrangement (include the names of all participants in the arrangement, and the nature and terms of the arrangement):
OUTSTANDING DEBT (Check all that apply)
Does the Applicant Broker-Dealer owe money to any of the following?
 □ Any NYSE Arca member or member organization or NYSE Arca OTP Holder □ Any other national securities or commodities exchange or national securities association
☐ Any other national securities or commodities exchange or national securities association ☐ Any member of any other national securities or commodities exchange or national securities association
Explain to whom the money is owed and the dollar amount. Attach a copy of arrangements made for repayment of this debt and
evidence of an agreement of repayment
No, the Applicant Broker-Dealer does not owe money to any of the above referenced persons or entities.

³ Applicant Broker-Dealers that do not have the requested financial information available are required to submit Pro Forma Financial statements for the most recent six (6) months or since inception, whichever is less.

NYSE Arca OTP Application January 2016

Please list th	e follo	wing individua Arca Rule 1.1	als: (A) each Allied Pe (c) ⁵ ; and (C) each Pers	rson as de	ECUTIVE OFFICERS Defined in NYSE Arca Rule 1. Defined in NYSE Arca Rule 11. Defined in NYSE Arca Rule 11.	1(b) ⁴ ; (B) each Approved Person 18(b)(2) ⁵ . <u>You may submit</u>
illumpie cop	ies oi t	ins total, in the	eded, or attach a copy	OI SCHE	dule A and Othedale B of For	
APPLYING	G AS:		ALLIED PERSON		APPROVED PERSON	
Name:			Title	e: _		CRD#
Firm Name::			Pho	one: _		
Email:						
		•	Supervisor of Authorized			
		Form U4 and	fingerprint information ⁸	is curren	t and accessible for this persor	on Web CRD™
APPLYING	G AS:		ALLIED PERSON		APPROVED PERSON	
Name:			Title	e: _		CRD#
Firm Name::			Pho	one: _		<u></u>
Email:						
		Designated :	Supervisor of Authorized	l Traders		
		Form U4 and	d fingerprint information ⁸	is curren	t and accessible for this persor	on Web CRD™
APPLYIN	G AS:		ALLIED PERSON		APPROVED PERSON	
Name:			Title	e: _		CRD#
Firm Name::			Pho	ne: _		
Email:						
		Designated	Supervisor of Authorized	l Traders		
		Form U4 and	d fingerprint information ⁸	is curren	t and accessible for this persor	on Web CRD™
APPLYIN	G AS:		ALLIED PERSON		APPROVED PERSON	
Name:			Title	e: _		CRD#
Firm Name::			Pho			
Email:						
1		Designated	Supervisor of Authorized	d Traders		
		Form U4 and	d fingerprint information ⁸	is curren	t and accessible for this persor	on Web CRD™

⁴ Pursuant to NYSE Arca Rule 1.1(b), the term "Allied Person" shall refer to an individual, who is: (1) an employee of an OTP Holder who controls such firm, or (2) an employee of an OTP Holder corporation who is a director or a principal executive officer of such corporation, or (3) an employee of an OTP Holder limited liability company who is a manager or a principal executive officer of such limited liability company, or (4) a general partner in an OTP Holder partnership; and who has been approved by the Corporation as an Allied Person.

OTP Holder partnership; and who has been approved by the Corporation as an Allied Person.

5 Pursuant to NYSE Arca Rule 1.1(c), the term "Approved Person" shall refer to a person who is not an OTP Holder, nor an employee or an Allied Person of an OTP Holder, and who: (1) is a director of an OTP Holder, or (2) controls an OTP Holder, or (3) beneficially owns, directly or indirectly, 5% or more of the outstanding equity securities of an OTP holder, or (4) has contributed 5% or more of the partnership capital; and who has been approved by the Corporation as an Approved Person.

⁶ NYSE Arca Rule 11.18(b)(2) refers to the designation of a person with authority to reasonably discharge his/her duties and obligations in connection with supervision and control of the activities of the Associated Persons of the OTP Holder. Pursuant to NYSE Arca Rule 1.1(d), the term "Associated Person" shall refer to a person who is a partner, officer, director, member of a limited liability company, trustee of a business trust, employee of an OTP Holder or any person directly or indirectly controlling, controlled by or under common control with an OTP Holder.

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SECTION 5 – REGISTERED TRADERS		
Each Applicant is required to register employees and associated persons in accordance with NYSE Arca rules. Pursuant to these Rules, Applicants must complete the necessary documentation and submit such documentation in the manner prescribed in Rule 2.23. Individual traders of the Applicant must successfully pass any required examination and identify registration with the Exchange within any and all applicable categories on Form U4. Proof of examination requirements, fingerprint card submission, and Form U-4s should be submitted by the Applicant to the Central Registration Depository ("Web CRD®") for review by NYSE Arca. Registration categories include, but are not limited to, the following:		
MM – Market Maker Authorized Traders of the Applicant	(Series 57 prerequisite)	
FB - Floor Broker (Series 57 prerequisite) Places list blad ideals and the first series and the first series are the first series	and the helf of the Apolites of	
Please list all individuals who will conduct trading activity on the Exch	ange on benait of the Applicant	
REGISTERED TRADER INFORMATION		
Name of Applicant:	CRD:	
Date of Birth:		
Phone:	Email:	
TYPE OF BUSINESS ACTIVITY TO BE CONDUCTED (Please chec	k appropriate box below)	
☐ Lead Market Maker (LMM)	Remote Market Maker (RMM)	
☐ Floor Market Maker (FMM) ☐	Floor Broker (FB)	
☐ Market Maker Authorized Trader (MMAT)		
APPLICATION CHECKLIST		
☐ A Form U-4 and Fingerprint card has been submitted directly	to WebCRD©	
☐ Individual has passed or been granted a waiver of the require	d examination	
REGISTERED TRADER INFORMATION		
Name of Applicant:	CRD:	
Date of Birth:		
Phone:		
Filolie.	Littali.	
TYPE OF BUSINESS ACTIVITY TO BE CONDUCTED (Please chec	k appropriate box below)	
☐ Lead Market Maker (LMM) ☐	Remote Market Maker (RMM)	
☐ Floor Market Maker (FMM) ☐	Floor Broker (FB)	
☐ Market Maker Authorized Trader (MMAT)		
APPLICATION CHECKLIST		
☐ A Form U-4 and Fingerprint card has been submitted directly	to WebCRD©	
☐ Individual has passed or been granted a waiver of the require	d examination	

You may submit multiple copies of this page, if needed

SECTION 6 – STATUTORY DISQUALIFICATION DISCLOSURE		
Pursuant to the Securities Exchange Act of 1934, as amended ("the Act"), NYSE Arca, Inc. ("NYSE Arca") may deny (or may condition) trading privileges or may bar a natural person from becoming associated (or may condition an association) with an OTP Holder for the same reasons that the Securities and Exchange Commission may deny or revoke a broker-dealer registration under the Act. The Act provides for Statutory Disqualification if a person has:		
 Been expelled, barred or suspended from membership in or being associated with an member of a self regulatory organization; had broker, dealer or similar privileges denied or suspended or caused such denial or suspension of another; Violated any provision of the Act; or Been convicted of a theft or securities related misdemeanor or any felony within ten (10) years of the date of applying for membership status or becoming an Associated Person. 		
Check here if you DO NOT have person(s) associated with the Applicant Broker-Dealer who is or may be subject to Statutory Disqualification.		
Check here if you DO have person(s) associated with the Applicant Broker-Dealer who is or may be subject to Statutory Disqualification.*		
Please identify any such person(s) associated with the Applicant Broker-Dealer who is or may be subject to Statutory Disqualification. Additionally, identify any such person(s) who are associated with the Applicant Broker-Dealer and who have been approved for association or continued association by another SRO due to a Statutory Disqualification.		
* Attach a sheet identifying any such person(s), including the following information: 1. Name and CRD number of the person(s). 2. Copies of documents relating to the Statutory Disqualification. 3. Description of each such person's duties (for non-registered individuals, this should include a statement indicating if the position allows access to books, records, funds or securities). 4. Explanation of action taken or approval given by any other SRO regarding each person.		
On behalf of		
Signature of Authorized Officer, Partner, Managing Member or Sole Proprietor:		
Print Name: Title:		

SECTION 7 – SUPERVISION		
Each OTP Holder must identify the person(s) that is a member, partner, director, or officer exercising responsibility for supervision of day-to-day compliance and maintenance of the firms written supervisory procedures ("WSPs"). Additionally, applicants subject to Exchange Act Rule 15c3-1 are required to have a designated Series 27 licensed principal, pursuant to NYSE Arca Rule 4.5.		
Name of Person responsible for maintaining WSPs: CRD#:		
Applicant Broker-Dealer's WSPs are enclosed.		
Name of Series 27 licensed principal (if applicable): CRD#:		

NYSE Arca Rules state:

- (a) Adherence to Law No Options Trading Permit Holder or Associated Person of an Options Trading Permit Holder may engage in conduct in violation of the federal securities laws, the Constitution or the Rules of the Exchange. Every Options Trading Permit Holder must supervise persons associated with the Options Trading Permit Holder as to assure compliance therewith.
- (b) Supervisory System Each Options Trading Permit Holder for whom NYSE Arca is DEA must establish and maintain a system to supervise the activities of its associated persons and the operations of its business. Such system must be reasonably designed to ensure compliance with applicable federal securities laws and regulations and NYSE Arca Rules. Final responsibility for proper supervision will rest with the Options Trading Permit Holder. The Options Trading Permit Holder's supervisory system must provide, at a minimum, for the following:
 - (1) The establishment and maintenance of written procedures as required by paragraph (c) of this Rule.
 - (2) The designation of a person with authority to reasonably discharge his/her duties and obligations in connection with supervision and control of the activities of the associated persons of the Options Trading Permit Holder.
 - (3) The Options Trading Permit Holder must undertake reasonable efforts to determine that all supervisory personnel are qualified by virtue of experience or training to carry out their assigned responsibilities.
 - (4) Each Options Trading Permit Holder must designate and specifically identify to NYSE Arca one or more persons who will be responsible for such supervision.
- (c) Written Procedures Each Options Trading Permit Holder must establish, maintain, and enforce written procedures to supervise the business in which it engages and to supervise the activities of its associated persons that are reasonably designed to ensure compliance with applicable federal securities laws and regulations, and with NYSE Arca Rules.

Pursuant to this rule, WSPs should describe the following:

- Specific identification of the individual(s) responsible for supervision either by name or by title and position.
- The supervisory steps and reviews to be taken by the appropriate supervisor this process should identify any exception reports and/or other documents being reviewed and the substantive area being reviewed (e.g., limit order protection, trade reporting, etc.). If an OTP Holder employs automated systems as part of its supervisory system, those systems should also be generally described.
- The frequency of such reviews this should be more specific than simply providing for "a review" or a "review from time to time." The frequency of reviews should be described (i.e., daily, weekly, monthly, quarterly, or annually).
- How reviews will be documented, for example, initialing order tickets or filling out review logs. The procedures should also provide for the documentation of steps taken as a result of supervisory reviews.

For Market Makers, the WSPs and supervisory systems of firms engaged in market making activities must address, at a minimum, trading practice rules (i.e., passive market making, firm quote rule compliance, limit order protection), trading systems, trade reporting, rules compliance and any other material aspect of the firm's market making business. WSPs should include the following subject areas:

- Size conventions
- Coordination of quotations, trades and trade reports
- Improper collaboration and coordination of Market Maker activities
- Failure to honor quotations
- Harassment
- · Late and inaccurate trade reporting

ALL OPTIONS TRADING PERMIT HOLDERS MUST KEEP ABREAST OF CHANGES IN LAWS, RULES AND REGULATIONS, MARKET PRACTICES AND INDICATED PATTERNS OF NON-COMPLIANCE AND MUST MODIFY THEIR SUPERVISORY PROCEDURES AND SYSTEMS AS NECESSARY.

SECTION 8 - CLEARING LETTER OF CONS	
Notice of Consent – To be completed by Cie	earing OTP Holder of Application Broker-Dealer
	ng agency named below, a member of the National Securities Clearing orporation ("OCC"), and an approved OTP Holder of NYSE Arca, Inc.
	agrees to accept full financial responsibility for all transactions effected following Applicant Broker-Dealer with the clearing agency:
Applicant Broker-Dealer	CRD# and/or SEC File#
Rules and may be relied upon by NYSE Arca,	ntee, letter of authorization, or notice of consent pursuant to NYSE Arca Inc., the NSCC, the OCC, and their respective members. This Notice of as amended from time to time, and shall remain in effect until revoked
Clearing OTP Holder (Broker-Dealer Name)	
Clearing OTP Holder (OCC Clearing #)	
Clearing OTP Holder (NSCC Clearing #)	
Signature of Authorized Officer, Partner or Managing Member of Clearing OTP Holder OTP Holder	Signature of Authorized Officer, Partner or Managing Member, or Sole Proprietor of
Print Name / Title	Print Name / Title
Date	Date

NYSE Arca, Inc.

DEA Application Requirements

SECTION 9- DESIGNATED EXAMINING AUTHORITY (DEA) REQUIREMENTS ITSFEA COMPLIANCE ACKNOWLEDGEMENT
This form should be completed by a Director, Officer, General Partner or Individual responsible for ensuring that the Broker-Dealer's ITSFEA Compliance Procedures are followed. In the future, this certification must be completed and filed with NYSE Arca along with the Broker-Dealer's year-end FOCUS Report (Form X-17A-5).
Broker-Dealer:
SEC#
The undersigned states and certifies as follows:
It is understood that should any Director, Officer, General Partner or Associated Person (as defined in NYSE Arca Rule 1.1(d)) of the Broker-Dealer acquire material, non-public information concerning a corporation whose securities are publicly traded, it may be a violation of NYSE Arca Rules and Federal securities laws to misuse such information or trade any securities issued by the corporation, or any options or other derivative securities based thereon, while such information remains non-public.
It is further understood that should any Director, Officer, General Partner or Associated Person of the Broker-Dealer obtain material, non-public information concerning the market in a security or group of securities, it may be a violation of NYSE Arca Rules and Federal securities laws to make improper use of such information in connection with trading in the security, group of securities or any option or other derivative based thereon.
It is also understood that it may be a violation of NYSE Arca Rules and Federal securities laws to disclose to any other person or entity any non-public, material corporate or market information that may be acquired regarding a publicly traded security or group of securities.
Additionally, the Broker-Dealer represents that it has established written procedures reasonably designed to prevent misuse of material non-public information by the Broker-Dealer or by any of the Broker-Dealer's Directors, Officers, General Partners or Associated Persons, taking into consideration the nature of the Broker-Dealer's business.
The Individual(s) responsible for overseeing and supervising the specific element of the member firm or organization's ITSFEA Compliance procedures has reviewed (or supervised the review of) the Broker-Dealer's proprietary, error account(s), and any outside brokerage securities accounts of Directors, Officers, General Partners, and Associated Persons with the Broker-Dealer, in accordance with the specific provisions (including timing and type of review) detailed in and required by the firm's written ITSFEA compliance procedures.
Based upon the assessment of the adequacy of those procedures and of the authority and diligence of the person(s) carrying out those procedures (except as to any securities transactions involving the possible misuse of non-public information which already have been reported to NYSE Arca), there is no reasonable cause to believe that any Director, Officer, General Partner, or Associated Persons of the Broker-Dealer has misused, made improper use of, or disclosed material non-public information, or may otherwise be in violation of NYSE Arca Rule 11.3
Signature of Authorized Officer, Partner, Managing Member, or Sole Proprietor Date
Print Name of Authorized Officer, Partner, Managing Member, or Sole Proprietor Title

NYSE Arca Equities Retail Order Tier Form

Instructions: This form is to be completed by NYSE Arca ETP Holders who would like to participate in the Retail Order Tier.

A "Retail Order" is an agency order <u>or a riskless principal order that meets the criteria of FINRA Rule 5320.03</u> that originates from a natural person and is submitted to the Exchange by an ETP Holder, provided that no change is made to the terms of the order with respect to price or side of market and the order does not originate from a trading algorithm or any other computerized methodology. <u>The term "natural persons" refers to the origination of the order from a request made by a human as opposed to the generation of an order by a computer algorithm. An order from a "natural person" can include orders on behalf of accounts that are held in a corporate legal form, such as an individual Retirement Account, Corporation, or a Limited Liability Corporation that has been established for the benefit of an individual or group of related family members, provided that the order is submitted by an individual.</u>

Please note: If an NYSE Arca ETP Holder uses an algorithm to determine to send an existing Retail Order into the NYSE Arca Equities Retail Order Tier program, such order is eligible for the Retail Order Tier and is not deemed to have originated from a trading algorithm strictly as a result of the brokerage firm's algorithm, provided that the NYSE Arca ETP Holder assures that the Retail Order meets the underlying requirements, including that the routing algorithm does not change the terms of the order with respect to price or side of the market. Additionally, the Retail Order provision preventing changes to the terms of the order (e.g. price or side) is not meant to prevent an NYSE Arca ETP Holder from ensuring a better execution experience for the retail customer, such as by adding a limit to a Retail Order.

An NYSE Arca ETP Holder may submit Retail Orders in a riskless principal capacity, as well as an agency capacity, provided that the member (1) submits a report, contemporaneously with the execution of the facilitated order, identifying the trade as riskless principal to FINRA (or another self-regulatory organization if not required under FINRA rules); and (2) has written policies and procedures to ensure that riskless principal transactions for which the member is relying on this exception comply with applicable FINRA rules.

1. Customer Information

er of NYSE Arca ETP	•	
CRD Number		
ness Contact Name		
ness Contact Phone		·
ness Contact E-Mail		
siness and Technology Que	tions	
an NYSE Arca E T P Member (hange?	ganization, do you currently have connectivity to the	☐ Yes ☐ No
is connection utilized for orde	routing, receiving market data or both?	☐ Order Routing ☐ Receiving Market Data ☐ Both
<u> </u>	n behalf of one or more broker-dealer customers, yo firms. We have a Broker Dealer Customer Form tha	·
ness Contact E-Mail siness and Technology Que an NYSE Arca ETP Member Change? hange? his connection utilized for orde ou are routing retail order flow arate document with this firm	ganization, do you currently have connectivity to the routing, receiving market data or both? n behalf of one or more broker-dealer customers, yo	☐ Order Routing ☐ Receiving Market Data ☐ Both ur firm will be required to execute

3. Retail Order Tier Supervisory Requirements

By executing this Application, the Applicant attests that substantially all orders submitted to NYSE Arca by the Applicant via Retail Order Ports or tagged as "Retail Orders" in the order entry message are Retail Orders and would meet the qualifications for such orders under the Retail Order Tier. An ETP Holder would be required to designate its Retail Order Ports, including adding new Retail Order Ports or removing existing Retail Order Ports that would no longer be used to submit Retail Orders, no later than the fifth trading day of the month in which the desired change is to become effective.

Applicant further attests that it has in place Written Supervisory Procedures (WSPs). Such WSPs require Applicant to:

(i) exercise due diligence before entering a Retail Order to assure that entry as a Retail Order is in compliance with the requirements specified by the Exchange, including that the Applicant maintain adequate substantiation that substantially all orders sent to the Exchange as Retail Orders meet the definition and that those orders not meeting the definition are agency orders that cannot be segregated from Retail Orders due to system limitations and are de minimis in terms of the overall number of Retail Orders submitted and (ii) monitor whether orders entered as Retail Orders meet the applicable requirements.

In addition, if Applicant represents Retail Orders from another broker-dealer customer, Applicant's WSPs must be reasonably designed to assure that the orders it receives from such broker-dealer customer that it designates as Retail Orders meet the definition of a Retail Order.

The Applicant must (i) obtain an annual written representation, in a form acceptable to the Exchange, from each brokerdealer customer that sends it orders to be designated as Retail Orders that entry of such orders as Retail Orders will be in compliance with the requirements specified by the Exchange; and (ii) monitor whether its broker-dealer customer's Retail Order flow meets the applicable requirements.

Name (Printed)	
Name (Signature)	
Title	
Date	

ATTACHMENT A

An ETP Holder is required to either designate certain of its order entry ports as "Retail Order Ports" and attest that substantially all orders submitted to the Exchange via such Retail Order Ports are Retail Orders or tag each order as a "Retail Order" in the order entry message. Additionally, an ETP Holder is required to designate its Retail Order Ports, including adding new Retail Order Ports or removing existing Retail Order Ports that would no longer be used to submit Retail Orders, no later than the fifth trading day of the month in which the desired change is to become effective.

If your firm would like to <u>create new</u> ports to be designated as "Retail Order Ports" please complete the **Customer Session**Request Form found here: https://www.nyse.com/publicdocs/nyse/markets/nyse/Client Session Request Form.pdf and email this form to the Connectivity team at <u>connectivity@nyse.com</u>. *Please Note:* These new ports should be created prior to completing this form. Once you have established these new ports with the Connectivity team you may then submit this form stating which ports will be designated as "Retail Order Ports."

	Retail Order Ports".		-			
				·		
rnatively, an ETP Holder i derSubID.	may designate Retail Orders	s by entering th	ne value "RE	「" in Fix Tag క	50, or the Arcal	Direct fie
derSubID. Checking this Holder attest	may designate Retail Orders s box identifies the ETP Holo s that all orders submitted to	der's intention	to mark Reta	l Orders by F	IX or ArcaDired	
derSubID. Checking this Holder attest	s box identifies the ETP Hold s that all orders submitted to	der's intention	to mark Reta	l Orders by F	IX or ArcaDired	
derSubID. Checking this Holder attest NYSE Arca ETP Holder Authorized Signatory of the	s box identifies the ETP Hold s that all orders submitted to	der's intention	to mark Reta	l Orders by F	IX or ArcaDired	
derSubID. Checking this Holder attest NYSE Arca ETP Holder Authorized Signatory of the	s box identifies the ETP Hold s that all orders submitted to	der's intention	to mark Reta	l Orders by F	IX or ArcaDired	
Checking this Holder attest NYSE Arca ETP Holder Authorized Signatory of the Print Contact Name	s box identifies the ETP Hold s that all orders submitted to	der's intention	to mark Reta	l Orders by F	IX or ArcaDired	
nderSubID. Checking this	s box identifies the ETP Hold s that all orders submitted to	der's intention	to mark Reta	l Orders by F	IX or ArcaDired	

Please return to Client Relationship Services at crs@nyse.com.

AP Form

NYSE Arca, Inc.

This Form is to be completed by persons required to be Approved Persons with the Exchange and for whom the required disclosure information is not available on Web CRD®.

Instructions

Prior to completing this form, the persons seeking Approved Person status ("Applicant") should be familiar with the NYSE Arca, Inc. and NYSE Arca Equities, Inc. (collectively, the "Exchange") Rules, particularly those relating to "Approved Persons," including but not limited to Arca Rule 1.1(c), 2.4, and 2.14, and Arca Equities Rule 1.1(d), 2.3, and 2.13.

- A copy of the completed Form must be retained by the Applicant and the member organization with which the Applicant is or will be associated ("Member Organization").
- To the extent necessary, provide additional information via a separate attachment referencing the section and question to which the additional information applies.
- The list of Approved Persons must be kept up-to-date with the Exchange and FINRA.
 - A new AP Form should be completed upon the occurrence of a change (e.g., a change in ownership, a new Approved Person)
 - o The elimination of an existing Approved Person should be provided to the Exchange and FINRA in writing (email is acceptable)
 - o Notification of changes should be provided to the Exchange (<u>crs@nyse.com</u>) and FINRA (<u>Q&RNY@finra.org</u>) within 30 days

For Applicants associated with firms <u>seeking</u> NYSE Arca membership, please email a signed and completed copy of the AP Form to Client Relationship Services at <u>crs@nyse.com</u>.

Sectio	n (
1.	Full Name of the Applicant:
2.	Full name and Web CRD # of the Member Organization with which the Applicant is or will be associated:
	Member Organization:
	Web CRD#:
3.	Approved Person Status is requested pursuant to the rules of the Exchange because the Applicant is not an ETP/OTP Holder, nor an employee or an Allied Person of a ETP/OTP Firm, and who:
о.	is a director of an ETP/OTP Firm controls an ETP/OTP Firm beneficially owns, directly or indirectly, 5% or more of the outstanding equity securities of an ETP/OTP Firm has contributed 5% or more of the partnership capital
4.	Is the applicant subject to a Statutory Disqualification – as the term is defined in Section 3(a)(39) of the Securities Exchange Act of 1934?
	Yes No If an Applicant or any person associated with the Applicant, subsequently become subject to a <i>Statutory Disqualification</i> after initial approval, this information must promptly be communicated to the Exchange by sending notification to FINRA at Q&RNY@finra.org .

AP Form – June 2015

Se	ction II
1.	Address of Applicant's principal place of business (complete address of actual location):
2.	Date and place of incorporation or jurisdiction under the laws of which Applicant was formed:
3.	Indicate whether the Applicant has operated under any other names and identify all such names:
<u></u>	Ation III
	ction III
Ву	signing below, the Applicant represents and acknowledges the following:
agr Org and App	Applicant is not relying upon the Exchange to provide any information concerning or relating to the Member Organization and ees that the Exchange has no responsibility to disclose to the Applicant any information concerning or relating to the Member ranization that it may have now or obtain at any future time. The Applicant agrees for itself, its personal representatives, successors a assigns that neither the Exchange, nor any investor, officer, trustee, agent, nor employee of said Exchange shall be liable to the oblicant with respect to the Applicant's investment or interest in the Member Organization or with respect to any repayment of any such estment or interest.
inv	understood that the statements made in connection with this Form will be relied upon by the Exchange and may be verified by estigation. The Applicant declares that all such statements are true, complete, current and accurate. It is also recognized that the change reserves the right to request additional information.
	Applicant undertakes and agrees to subject itself to the jurisdiction of the Exchange and to abide by such provisions of the Rules of Exchange as would at any time apply to an "Approved Person" as such term is defined in Arca Rule 1.1(c) and Arca Equities Rule (d).
dea exi am des	e Applicant hereby agrees to comply with the relevant provisions of the Securities Exchange Act of 1934, as amended, and the Rules Regulations thereunder, and to furnish said Exchange with such information with respect to the Applicant's relationship and alings with its affiliated member organization as the Exchange may require, to supply the Exchange with information relating to the stence of any "statutory disqualification" (as such term is defined in Section 3(a)(39) of the Securities Exchange Act of 1934, as ended) to which the Applicant or any person associated therewith may be subject, to permit examination by the Exchange or its signee of Applicant's books and records in order to verify the accuracy of the aforesaid information, and to subject itself to and abide the Exchange' disciplinary authority.
ass	plicant represents that except as is specifically indicated on this form or any supplement thereto, neither it nor any person ociated therewith is subject to a statutory disqualification. (See Section 3(a)(39) of the Securities Exchange Act of 1934, as ended).
full	olicant covenants and agrees that the foregoing statements, warranties, representations and undertakings will continue to apply with force and effect notwithstanding that the Member Organization may have changed its name or form of organization, or legal status that retained its same SEC Broker Dealer number) unless Applicant shall have otherwise notified the Exchange, in writing.
Sia	nature: Date:
- '3	(A Duly Authorized Executive Officer, Senior Partner, Managing Member or equivalent of the Applicant)
Pri	nted Name:
Titl	e:

NYSE Arca Equities, Inc.

Application to Become a Lead Market Maker* In a Particular NYSE Arca Primary Listed Security

*Must be an existing Lead Market Maker ETP in order to submit this application

LIST OF SECURITIES FOR LMM REGISTRATION				
Unless otherwise indicated by NYSE Arca Equities, this application shall be submitted only by a registered Lead Market Maker Equity Trading Permit ("LETP") holder that seeks to apply to become a Lead Market Maker in a particular NYSE Arca Equities listed security. In addition to the information requested below, any LMM applicant that wishes to provide additional information to the listed company (e.g., trading firm's background), may submit such information with its application. Note that any written information may be subject to regulatory action if information is deemed to be deliberately misleading or inaccurate.				
Date:	_ SEC #:	CRD#:	MPID:	
Name of Applicant LETP:				(If NASDAQ Participant)
Business Contact:		Business P	hone:	
Business Email:				
Solicitations for LMM Applicat should be sent to this Email a				
Name, telephone number, and	d email address of the contact th	nat will serve as the Lead	l Market Maker Desig	nee:
Name:	Phone:		Email:	
This Designee should be liste MMAT. The Designee will se connection with an LMM Appl	d within Section 3 of the LETP's rve as the main contact for the Lication.	Market Maker Application MM firm and must be pre	in and may, but need esent at any interview	not, be registered as a /s with a listing company in
LMM applicants are required t	o ensure the following informati	on on file with the Excha	nge is accurate and ι	up to date:
☐ Organizational Profile				
☐ Other SRO affiliations of	the Applicant			
☐ A list of registered MMAT	s, including NYSE Arca require	ments regarding the Marl	ket Maker Orientation	Program for each
☐ Supervisory procedures of	of the Applicant relating to Marke	et Making		
Each LMM applicant is also required to attest to the following questions. Each item should be initialed by an authorized Officer, Partner, Managing Member, or the Sole Proprietor of the Applicant. If any of the below items results in a "Yes" answer, please supply additional details with this application. Has the physical makeup of the trading floor/facilities or actual location of the MMAT(s) for the Applicant changed since previous disclosure to the Corporation?				
PROPOSED DECISTRAT	IONO Blanca liet the coop		luing to bocor	45- 1 RARA*.
* LMM applicants will be required Equities Rule 7.25	to be registered as an Odd Lot Dea	ler in securities in which the	y are designated as LM	M, pursuant to NYSE Arca
Security Name:			Symbol:	
Designated Market Maker Aut	thorized Trader(s) for this securi	ty:		
Name:	····-		CRD#:	
Name:			CRD#:	
Name:			CRD #:	
For future additions or change	es to your list of securities, you v	will be required to submit	additional copies of \$	Sections 7 & 8.

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On this page, please describe all contacts with the companies listed above prior to this application, including the names and positions involved, date and circumstances of contact, and whether in person or otherwise. If there have not been any contacts, please so state.		
Name of Company	Description and Date of Contact	
·		
	•	

INFORMATION FOR LEAD MARKET MAKER

LMMs are subject to NYSE Arca Equities rules. To ensure compliance, please consult your compliance department and/or legal counsel to determine the rules that are applicable, including the rules referenced below.

NYSE Arca Equities Rule 7.22: Registration of Market Makers in a Security

(d) Designated Market Makers and Lead Market Makers shall be selected by the Corporation. Such selection shall be based on, but is not limited to, the following: experience with making markets in equities; adequacy of capital; willingness to promote the Exchange as a marketplace; issuer preference; operational capacity; support personnel; and history of adherence to Exchange rules and securities laws.

NYSE Arca Equities Rule 7.24: Designated Market Maker Performance Standards

- (a) Designated Market Makers will be required to maintain minimum performance standards the levels of which may be determined from time to time by the Corporation. Such levels will vary depending on the price, liquidity, and volatility of the security in which the Designated Market Maker is registered. The performance measurements will include (i) percent of time at the NBBO; (ii) percent of executions better than the NBBO; (iii) average displayed size; (iv) average quoted spread; and (v) in the event the security is a derivative security, the ability of the Designated Market Maker to transact in underlying markets.
- (b) Designated Market Makers that are Lead Market Makers will be held to higher performance standards in the securities in which they are registered as Lead Market Makers than Designated Market Makers that are not Lead Market Makers.

NYSE Arca Equities Rule 8.201(g): Commodity-Based Trust Shares; Market Maker Accounts

Market Maker Accounts. An ETP Holder acting as a registered Market Maker in Commodity-Based Trust Shares must file with the Exchange in a manner prescribed by the Exchange and keep current a list identifying all accounts for trading in an underlying commodity, related commodity futures or options on commodity futures, or any other related commodity derivatives, which the Market Maker may have or over which it may exercise investment discretion. No Market Maker shall trade in an underlying commodity, related commodity futures or options on commodity futures, or any other related commodity derivatives, in an account in which a Market Maker, directly or indirectly, controls trading activities, or has a direct interest in the profits or losses thereof, which has not been reported to the Exchange as required by this Rule.

In addition to the existing obligations under Exchange rules regarding the production of books and records, the ETP Holder acting as a Market Maker in Commodity-Based Trust Shares shall make available to the Exchange such books, records or other information pertaining to transactions by such entity or registered or non-registered employee affiliated with such entity for its or their own accounts for trading the underlying physical commodity, related commodity futures or options on commodity futures, or any other related commodity derivatives, as may be requested by the Exchange

AUTHORIZED ACKNOWLEDGEMENT OF THE CON	TENTS HEREIN
The undersigned attests that the contents submitted on beha required. Further, the Applicant will abide by all rules of the E	If of the Applicant are complete and agrees to update information as Exchange, as may be amended from time to time.
Signature of Authorized Officer, Partner, Managing Member, or Sole Proprietor	Date
Print Name	Title

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NYSE Arca Equities, Inc.

Application for Market Maker* Registration

*Includes Market Maker & Lead Market Maker

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Application Process

Filing Requirements

Prior to submitting the <u>Application to become a Market Maker</u>, an applicant Broker-Dealer must have completed the Equity Trading Permit ("ETP") application. A firm will not be eligible for approval as a Market Maker until after their ETP application is approved.

Checklist

Applicant ETP must complete and submit all materials as required in this Application Checklist (page 4) to crs@nyse.com.

If you have questions regarding the application, you may direct them to NYSE Arca Client Relationship Services: Email: crs@nyse.com; Phone: (212) 896-2830, option 5.

Application Process

- Following submission of the <u>Application for Market Maker Registration</u> and supporting documents, NYSE Arca will review the
 application for completeness, assess the firm's capital sufficiency, review registration and disclosure information for the Applicant
 and each listed Market Maker Authorized Trader, and review the Applicant's written supervisory procedures.
- Applicant ETP Broker-Dealers must designate within Section 1 whether they are applying as a Market Maker ETP ("METP"), and/or as a Lead Market Maker ETP ("LETP").
- Applicant Broker Dealer is required to consult with an NYSE Arca Sales Representative to determine the most beneficial
 connectivity option. NYSE Arca will then coordinate the connectivity between the Applicant Broker Dealer and the Exchange. For
 Lead Market Maker applicants, the Exchange will assess the Applicant's trading systems by using the NYSE Arca LMM
 Certification Test.
- If review of Statutory Disqualification Disclosure information and/or a background investigation indicates that the applicant Broker-Dealer has an associated person(s) with a possible statutory disqualification, NYSE Arca will contact the representative of the applicant Broker-Dealer to discuss the statutory disqualification process.
- If it appears that the applicant Broker-Dealer has outstanding debt, civil judgment actions and/or regulatory disciplinary actions, the applicant Broker-Dealer will be contacted by NYSE Arca for further information.
- Applicants who have completed and returned all documents without indication of a statutory disqualification, outstanding debt, civil judgment actions and/or regulatory disciplinary actions will be presented to NYSE Arca for approval or disapproval without delay.
- NYSE Area will promptly notify the applicant Broker-Dealer in writing of their decision.
- Upon approval and once connectivity is established, your NYSE Arca Sales Representative will inform you of your ability to trade.
- In the event an applicant Broker-Dealer is disapproved by NYSE Arca, the applicant Broker-Dealer has an opportunity to be heard upon the specific grounds for the disapproval, in accordance with the provisions of NYSE Arca Equities Rule 10.13. A disapproved applicant desiring an opportunity to be heard shall file a written application with the Secretary of the Corporation within thirty (30) calendar days after such action has been taken.

Approved Lead Market Maker ETP Firms:

Approved LETP firms will receive all Green Sheet postings via e-mail and may apply to become the LMM in a particular security with NYSE Arca as its primary listing venue by completing the LMM Registration Application. Eligible LETP firms may be selected as the LMM for a particular security based on input by the listing company, or may be selected randomly from a list of LETPs who have submitted their LMM application for that security. LMM selection based on input by the listing company will require interviews between the LMM applicant(s) and the listing company.

APPLICATION CHECKLIST & FEES - NEW NYSE ARCA MARKET MAKER APPLICANTS

- Approved Equity Trading Permit ("ETP") application
- ☐ Application for Market Maker Registration, Sections 1 through 6
- Form U4 and fingerprint cards for each Market Maker Authorized Trader listed in Section 3 are available on Web CRD®
- Proof of Passing Series 7 (prior to May 1, 2016) or Series 57 (Effective May 1, 2016) Test Score for each Market Maker Authorized Trader listed in Section 3; or
- Request for a Series 57 Waiver has been requested via WebCRD been granted by NYSE Arca.
- Market Maker Orientation Acknowledgement https://www.nyse.com/publicdocs/nyse/markets/liquidity-programs/arca_mm_orientation.pdf
- Copy of Applicant's Written Supervisory Procedures ("WSPs") for Market Making on NYSE Arca, LLC
- □ Financial Documentation
 - Four (4) Most Recent FOCUS Reports¹ and Most Recent Audited Financial Statements, if applicable
 - Most Recent Balance Sheet and Capital Computation
 - · Six Month Profit/Loss Projection
 - · Subordination Agreements, if applicable
- All examination reports and corresponding responses from the Applicant Broker-Dealer for the previous two (2) years
- Organizational Documents: Articles of Incorporation and Bylaws; Partnership Agreement; Limited Liability Company ("LLC")
 Agreements; Operating Agreement; or similar documentation
- Copy of Written Supervisory Procedures, Anti-Money Laundering Procedures, and Insider Trading Act Procedures (if separate)

ADDITIONAL CHECKLIST FOR BROKER-DEALERS REQUESTING TO BECOME A LEAD MARKET MAKER ETP ON NYSE ARCA

- Application for Market Maker Registration (if not completed concurrently with Market Maker application):
 - Section 1 to identify intent to apply as a Lead Market Maker ETP
 - Sections 3 & 4 for any previously undisclosed Market Maker Authorized Traders
 - Section 6
- □ NYSE Arca LMM Certification Test
 - Approved Lead Market Makers must confirm in writing that they have tested and are able to maintain continuous two-sided quotes.

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¹ Applicants must demonstrate that they have current net capital of 140% of their minimum net capital requirement or \$20,000 in excess of their minimum dollar net capital requirement, whichever is greater. If the Broker-Dealer has reported net losses for the period reviewed, the Firm's financial statements must demonstrate that its excess net capital can withstand six (6) consecutive months of average losses. Applicant Broker-Dealers that do not have the requested financial information available are required to submit Pro Forma Financial statements for the most recent six (6) months or since inception, whichever is less.

EXPLANATION OF TERMS & PROCESSES

For purposes of this application, the following terms shall have the following meanings:

Applicant Broker-Dealer – the Broker-Dealer applying as a registered Market Maker or amending this form to become a registered Market Maker.

Associated Person - a person who is a partner, officer, director, member of a LLC, trustee of a Business Trust, or employee of an ETP Holder or any person directly or indirectly controlling, controlled by or under common control with an ETP Holder.

Control – (as defined on Form-BD) the power, directly or indirectly, to direct the management or policies of a company, whether through ownership of securities, by contract or otherwise. Any person that (1) is a director, general partner or officer exercising executive responsibility (or having similar status or functions); (2) directly or indirectly has the right to vote 25% or more of a class of a voting security or has the power to sell or direct the sale of 25% or more of a class of voting securities; or (3) in the case of a partnership, has the right to receive upon dissolution, or has contributed, 25% or more of the capital, is presumed to control that company.

Central Registration Depository System (Web CRD®) – A centralized electronic registration system maintained by FINRA which provides information on registered representatives and principals for members of participant organizations. This database contains employment history, exam scores, licensing information, disciplinary actions, fingerprint results, and other related registration information. NYSE Arca. Inc. is a participant of this system.

Designated Examining Authority (DEA) – the SEC will designate one Self-Regulatory Organization ("SRO") to be a Broker-Dealer's examining authority, when the Broker-Dealer is a Member or ETP Holder of more than one SRO. Every Broker-Dealer is assigned a DEA, who will examine the Broker-Dealer for compliance with financial responsibility rules. The SEC will make the DEA assignment based on the SRO examination program and the Broker-Dealer's primary business location.

Designated Market Maker ("DMM") - a registered Market Maker that participates in the Directed Order Process

Direct Owners/Executive Officers – refers to (1) a director, general partner or officer exercising executive responsibility (or having similar status or function); or (2) directly or indirectly has the right to vote 5% or more of a class of voting security or has the power to sell or direct the sale of 5% or more of a class of voting securities; (3) is entitled to receive 5% or more of the net profits; (4) in the case of a partnership, all general partners and those limited and special partners that have the right to receive upon dissolution or have contributed, 5% or more of the capital; or (5) in the case of a LLC, those members that have the right to receive upon dissolution, or have contributed, 5% or more of the LLC's capital, and if managed by elected managers, all elected managers.

Financial Arrangement – (1) the direct financing of an ETP Holder's dealings upon the Exchange; (2) any direct equity investment or profit sharing arrangement; or (3) any consideration over the amount of \$5,000.00 including, but not limited to, gifts, loans, annual salaries or bonuses.

Lead Market Maker ("LMM") – a registered Market Maker that is the exclusive DMM in listings for which the Corporation is the primary market

Lead Market Maker ETP ("LETP") - an approved Market Maker with NYSE Arca, Inc. eligible to apply as an LMM

Market Maker – an ETP Holder approved by the Corporation to act as a Market Maker pursuant to NYSE Arca Equities Rule 7.20

Market Maker Authorized Trader ("MMAT") – an authorized trader who performs market-making activities pursuant to NYSE Arca Equities Rule 7.21, on behalf of a Market Maker.

NYSE Arca, Inc. ("NYSE Arca" or the "Corporation") – a Delaware corporation as described in the Corporation's Certificate of Incorporation and Bylaws. NYSE Arca is a national securities exchange as that term is defined by Section 6 of the Securities Exchange Act of 1934, as amended. NYSE Arca, Inc. is the Self-Regulatory Organization for NYSE Arca, LLC

NYSE Arca, LLC - The equities marketplace and a trading facility of NYSE Arca, Inc.

NYSE Arca Equities - NYSE Arca Equities, Inc. (a wholly owned subsidiary of the NYSE Arca, Inc.).

Self-Regulatory Organization (SRO) - each exchange or national securities association is an SRO. Each SRO must have rules that provide for the expulsion, suspension and other discipline of member Broker-Dealers for conduct inconsistent with just and equitable principles of trade.

Symbols – refers to stock symbols that may be assigned to a MMAT. Symbols are assigned at the firm level and are traded by the MMATs. Symbols may be added or removed on a daily basis, based on requests emailed to Exchange Security Operations, operationsclearing@nyx.com, with said request. At this time, OTC symbols are not eligible for market making. Upon approval, by default, two test symbols (ZVV and M.TEST) will be assigned to the firm for testing purposed

SECTION 1 - ORGANIZATION	NAL PROFILE			
Date: SE	EC #: (CRD #:	MPID (If NASDAQ Participant)	
☐ Application ☐	Amendment			
THE APPLICANT INTENDS TO R	EGISTER AS A(N) (Check all	that apply):		
☐ Market Maker (METP)	☐Lead Market Ma	ker (LETP)		
GENERAL INFORMATION				
Name of Applicant ETP:				
Business Address:				
City:		State:	Zip Code:	
Business Phone:				
Contact Name:				
Phone:		_	· · · · · · · · · · · · · · · · · · ·	
		rax		
Email:		_		
ETP APPROVAL STATUS				
	currently an approved Equity ⁻ ants must be approved ETP h		Ider with NYSE Arca Equities*	
NET CAPITAL				
Amount:	As of Date:	Focus Rep	oort Line Item*:	
*Submitting the firm's most recent section.	Quarterly FOCUS report and	highlighting the Ne	et Capital is an alternative to com	pleting this
Source of Net Capital (check all	that apply):			
☐ Long Proprietary Positions	☐ Interest/Dividends/Com	missions [☐ Secured Demand Note	☐ Cash
☐ Subordinated Loan	☐ Clearing/Good Faith De	oosits [Other	
SECURITIES				
List the number of securities for which your firm requests approval:				
OTHER BUSINESS ACTIVITIE	ES			
Check all that apply:				
☐ Investment Banking	☐ Public Securities Busine	ss (☐ Proprietary Trading	
Options Market Maker	☐ Other			

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SECTION 2 – OTHER AFFILIATIONS				
Is the Applicant a dealer/specialist or Market Maker on a registered national securities exchange(s) or association? If yes, please provide the relevant information below.				
☐ Yes ☐ No				
Applicants who currently act as pursuant to NYSE Rules 36 an	Applicants who currently act as a Specialist on the New York Stock Exchange, LLC ("NYSE") are reminded of their requirements pursuant to NYSE Rules 36 and 98.			
SRO:				
Operating Capacity:				
List Securities				
SRO:				
Operating Capacity:				
List Securities		,		
SRO:				
Operating Capacity:		· ·		
List Securities				
1				

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SECTION 3 – MARKET MAKER AUTHORIZED TRADER APPLICANT LIST Ensure a Form U4 for each of the individuals identified below is available on Web CRD®. To be eligible for registration as a MMAT, as defined in NYSE Arca Equities Rule 1.1(v), a person must (i) have successfully completed the General Securities Representative Examination (Series 7) prior to May 1, 2016 or successfully complete the Securities Trader Qualification Examination (Series 57) effective May 1, 2016, (ii) complete the NYSE Arca Equities sponsored training and orientation program, and (iii) register each individual on Web CRD® in the appropriate NYSE Arca registration category (MT). NYSE Arca Equities sponsored training and orientation program is available at: https://www.nyse.com/publicdocs/nyse/markets/liquidity-programs/arca_mm_orientation.pdf LEAD MARKET MAKER DESIGNEE (Required for Lead Market Maker ETP Applicants Only) _____ Date of Birth: Full Name: Street Address: Suite/Floor: City: State: _____ Zip Code: Fax Number: Phone Number: E-Mail Address: Will this individual be registered as a Market Maker Authorized Trader: Yes (Please complete the information below) ☐ No Employer Broker-Dealer: Operating Capacity: SRO Affiliation: Employment Dates: Form U4, Proof of Series 7/Series 57, and Fingerprint Card Information is current and accessible for this person on WebCRD® MARKET MAKER AUTHORIZED TRADER ____ Date of Birth: Full Name: CRD #: _____ Qualifying Exam: ☐ Yes ☐ No NYSE Arca Orientation: Yes No _____ Employer CRD #: Employer Broker-Dealer: Form U4, Proof of Series 7/Series 57, and Fingerprint Card Information is current and accessible for this person on WebCRD® MARKET MAKER AUTHORIZED TRADER Date of Birth: Full Name: CRD #: _____ Qualifying Exam: ☐ Yes ☐ No NYSE Arca Orientation: ☐ Yes ☐ No Employer Broker-Dealer: Employer CRD #:

Form U4, Proof of Series 7/Series 57, and Fingerprint Card Information is current and accessible for this person on WebCRD®

PLEASE USE MULTIPLE COPIES OF THIS FORM TO LIST ADDITIONAL MARKET MAKER AUTHORIZED TRADERS

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SECTION 4 - MARKET MAKER ORIENTATION ACKNOW	VLEDGEMENT
The firm acknowledges responsibility that each MMAT listed with the entire Market Maker Orientation program offered on the NYS http://www.nyse.com/equities/nysearcaequities/1158747143951. by each MMAT is a requirement of application approval.	
The Applicant Broker-Dealer also acknowledges that failure by a NYSE Arca, LLC may result in disciplinary action against the Bro	
Applicant Broker-Dealer	
Signature of Authorized Officer, Partner, Managing Member, or Sole Proprietor	Date
Print Name	Title

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SECTION 5 – DESIGNEE ASSIGNMENT				
A "Designee" is a person assigned by the firm who is authorized to add and remove an MMAT's registered symbols. Typically, the Designee refers to any person that is a partner, director, or officer exercising executive responsibility (or having similar status or functions) for supervising MMATs (as defined in NYSE Arca Equities Rule 1.1(v)). This section allows a Designee to assign the Designee function authority to other members of the firm. By default, Head Traders fall under this category; however, such persons are required to be designated below.				
DESIGNEE				
Full Name:		_ _		
Title:		_		
Email Address:		Phone Number:		
DESIGNEE				
Full Name:		_		
Title:		_		
Email Address:		Phone Number:		
DESIGNEE				
Full Name:		_		
Title:		_		
Email Address:		Phone Number:		
DESIGNEE				
Full Name:				
Title:		_		
Email Address:		Phone Number:		
AUTHORIZED ACKNOWLEDGEMENT				
Signature of Authorized Member, or Sole Propri	d Officer, Partner, Managing ietor	Date		
Print Name		Title		

The undersigned, rules and regulat	REQUIRED INFORMATION & ACKNOWLEDGEMENT applying for registration as a Market Maker*, accepts full responsibility for having knowledge of and adhering to all tions governing the equities trading facility of NYSE Arca Equities called NYSE Arca LLC. The undersigned following requirements:
Note:	mum Net Capital Requirements: the requirements in items 1(a) and (b) apply only to the registered Market Maker rather than to each MMAT dually.
(a)	Market Makers Subject to the Aggregate Indebtedness Requirement Maintain minimum net capital that is the greater of: (i) \$100,000; (ii) \$2,500 for each security that it is registered as a Market Maker (unless a security in which it makes a market has a market value of \$5 or less, in which event the amount of net capital shall be not less than \$1,000 for each such security) based on the average number of securities that such Market Maker is registered during the 30 days immediately preceding the computation date; (iii) 6 2/3 percent of aggregate indebtedness; or (iv) the amount prescribed by SEC Rule 15c3-1.
(b)	Market Makers Subject to the Alternative Net Capital Requirement Maintain minimum net capital that is the greater of (i) \$250,000; (ii) 2 percent of aggregate indebtedness; or (iii) the amount prescribed by SEC Rule 15c3-1.
	ide monthly financial statements consisting of FOCUS Form X-17A-5 to FINRA's Risk Oversight & Oper. Reg rtment for Market Maker capital compliance review.
	ide detailed financial reports and such other operational reports to FINRA's Risk Oversight & Oper. Reg department may require.
	ose promptly any material change in financial or operational condition, or in personnel in accordance with the rules procedures of NYSE Arca Equities.
activi laws	blish, maintain, and enforce written procedures to supervise the business in which it engages and to supervise the titles of its associated persons that are reasonably designed to ensure compliance with applicable federal securities and regulations and NYSE Arca Equities' rules. Such written procedures shall at all times be available for inspection YSE Arca Equities staff.
	Maker and/or Lead Market Maker

AUTHORIZED ACKNOWLEDGEMENT OF THE CONTENTS HEREIN						
The undersigned attests that the contents submitted on behalf required. Further, the Applicant will abide by all rules of the Excha	of the Applicant are complete and agrees to update information as ange, as may be amended from time to time.					
Signature of Authorized Officer, Partner, Managing Member, or Sole Proprietor	Date					
Print Name	Title					

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NYSE Arca Equities, Inc.

Equity Trading Permit Short Form Application

NYSE Arca Equities Short Form ETP Membership Application and Agreement

To qualify for Short Form Equities Trading Permit (ETP) Membership on NYSE Arca, the applicant must be an approved NYSE Arca Options Trading Permit (OTP) Holder. Current OTP Holder applicants are eligible for expedited approval. To apply, please complete and submit this Short Form Application, Membership Agreement, Clearing Letter of Consent and NYSE Arca Equities User Agreement to:

NYSE Arca Equities
Attn: Client Relationship Services
Email: crs@nyse.com

KEY PERSONNEL					
Please identify the key personnel who hold the below positions (or the individual whose responsibilities are the functional equivalent of such position, regardless of actual titles used by the Applicant Firm) and who will want to receive communications pertaining to our equities markets.					
Chief Executive Officer ("C	EO")				
Name:		CRD:			
Phone:	Fax:	·			
Email:	<u></u>	<u>-</u>			
Chief Financial Officer ("CI	·O")				
Name:		CRD:			
Phone:	Fax:				
Email:		-			
Chief Compliance Officer ("CCO")				
Name:		CRD:			
Phone:	Fax:				
Email:		_			
Chief Operations Officer ("	COO")				
Name:		CRD:			
Phone:	Fax:				
Email:		-			
Head of Clearing					
Name:		CRD:			
Phone:	Fax:				
Email:		-			
Head of Connectivity					
Name:	·	CRD:			
Phone:	Fax:				
Email:		_			
Head of Trading					
Name:		_ CRD:			
Phone:	Fax:				
Email:	· .	-			

SECTION 1 – Short Form Membership Application						
Short Form Eligibility:						
Applicant is currently a member in good standing of NYSE Arca Options						
General Information						
Name of Applicant Broker-Dealer:						
Business Address:						
City:		State:	Zip Code:			
Business Phone:		_ Fax:				
Email:			·			
Web Address, if any:						
CRD Number:		_				
NYSE Arca Options OTP ID:		_				
Designated Examining Authority:		_				
Contact Information						
Contact Name:						
Job Title / Position			_			
Phone:		Fax:				
Email:						
Type of Business to be Conducted With Equity Trading Permit (Check all that apply)						
☐ Market Maker*		Public Custome	r Business			
Clearing Services		Proprietary Trac	ding			
Other						
* Please also complete Application for Registration of Market Makers/Odd Lot Dealers						

SECTION 2 - Membership Agre	ement	
	o abide by the Bylaws and Rules of NYSE Arca E interpretations, directives or decisions adopted b	•
to NYSE Arca, upon its request, a and reputation of Applicant Broke all liability in furnishing such infor governmental agency, SRO, com	es any SRO, commodities exchange, government any information that such person may have concur- r-Dealer or its associated persons, and releases mation. Applicant Broker-Dealer authorizes NYS modities exchange or similar entity, any informat sociated persons, and releases NYSE Arca from	erning the ability, business activities, such person or entity from any and SE Aroa to make available to any ion it may have concerning the
application, including termination	edges its obligation to update any and all informa of membership with another SRO, which may ca stood that in that event, additional information ma	use a change in the Applicant
Applicant Broker-Dealer	•	
- Application broken beater.		
Signature of Authorized Officer, Partner, Managing Member or Sole Proprietor		Date:
Applicant Broker-Dealer or its ass such information. Applicant Broker-Dealer acknowle application, including termination Broker-Dealer's DEA. It is undersuched the Applicant Broker-Dealer. Signature of Authorized	ecciated persons, and releases NYSE Arca from edges its obligation to update any and all informate of membership with another SRO, which may ca	any and all liability in furnishing ation contained in any part of this buse a change in the Applicant

Title:

Print Name:

SECTION 3 – Clearing Letter of Consent Notice of Consent – To be completed by Cl	learing ETP Holder of Application Broker-Dealer
The undersigned hereby represents the cleari	ing agency named below, a member of the National Securities Clearing Holder of NYSE Arca, LLC, a facility of NYSE Arca.
	y agrees to accept full financial responsibility for all transactions effected e following Applicant Broker-Dealer with the clearing agency:
Applicant Broker-Dealer	CRD# and/or SEC File#
Equities Rules and may be relied upon by NY	sintee, letter of authorization, or notice of consent pursuant to NYSE Arca SE Arca Equities, NYSE Arca, Inc., the NSCC, and their respective oject to NYSE Arca Equities Rules, as amended from time to time, and by the Clearing ETP Holder.
Clearing ETP Holder (Broker-Dealer Name)	_
Clearing ETP Holder (NSCC Clearing #)	
Signature of Authorized Officer, Partner or Managing Member of Clearing ETP Holder ETP Holder	Signature of Authorized Officer, Partner or Managing Member, or Sole Proprietor of
Print Name / Title	Print Name / Title
Date	Date

NYSE Arca ETP Short Form June 2015

	, with its principal offices located at Arca operates an exchange trading (SE Arca pursuant to the terms of the	nis User Agreement. Use of NYSE Arca is
User:		
Business Address:		
Corporate Form:		
State of Incorporation:		
Telephone:	Primary Contact:	
Fax:	Fmail [.]	
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Provided that User is an authorized ETP Holder (as defined herein) or a Sponsored Participant (as defined herein) in good standing with NYSE Arca and has paid the requisite fees, NYSE Arca will provide User with access pursuant to these general terms and conditions, which User hereby acknowledges and accepts. User agrees to abide by these general terms and conditions and be bound by the Certificate of Incorporation, Bylaws, Rules and Procedures of NYSE Arca Equities, as amended from time to time, ("NYSE Arca Equities Rules") with respect to NYSE Arca.

For purposes of this Agreement, an "ETP" shall refer to an Equity Trading Permit issued by NYSE Arca Equities for effecting approved securities transactions on NYSE Arca. An "ETP Holder" shall refer to a Sole Proprietorship, Partnership, Corporation, LLC or other organization in good standing that has been issued an ETP in accordance with NYSE Arca Equities Rules. A Sponsored Participant shall refer to a person that has entered into a sponsorship arrangement with an ETP Holder (a "Sponsoring ETP Holder") as described in Section 1(e) below. An Authorized Trader shall refer to a person authorized to submit orders to NYSE Arca on behalf of his or her User. As used in this Agreement, the requirement that a User "comply with NYSE Arca Equities Rules" or "act in compliance with NYSE Arca Equities Rules" (or such other similar phrases) shall mean, with respect to a Sponsored Participant, that such Sponsored Participant shall comply with NYSE Arca Equities Rules as if it were an ETP Holder.

1. RIGHTS AND OBLIGATIONS.

- (a) NYSE Arca, LLC ("NYSE Arca"). Pursuant to the terms and conditions of this User Agreement, NYSE Arca grants the User a personal, non-exclusive, non-transferable right to access NYSE Arca solely for the intended purpose and only in accordance with the then-current NYSE Arca Equities Rules. For purposes of this User Agreement, the "intended purpose" is to place orders with NYSE Arca for execution and to receive information from NYSE Arca about such orders. The User is solely and exclusively responsible for any hardware, software, communication equipment, communication services, information formatting requirements or other items or services necessary for accessing and using NYSE Arca.
- (b) Restrictions on Use; Security. User may not sell, lease, furnish or otherwise permit or provide access to NYSE Arca or any information or data made available therein to any other entity or to any individual that is not User's employee, customer or agent or a User's Sponsored Participant. User accepts full responsibility for its employee's, customers', and agent's use of NYSE Arca, including any Sponsored Participants' use, which use must comply with NYSE Arca Equities Rules and the User's obligations under this User Agreement. User will take reasonable security precautions to prevent unauthorized use of or access to NYSE Arca, including unauthorized entry of information into NYSE Arca, or the information and data made available therein. User understands and agrees that User is responsible for any and all orders, trades and other messages and instructions entered, transmitted or received under identifiers, passwords and security codes of Authorized Traders, and for the trading and other consequences thereof.
- (c) <u>User Information</u>. User hereby grants to NYSE Arca a perpetual, non-exclusive, world-wide, irrevocable, royalty-free, fully-paid-up license to use, reproduce, display, compile and modify the information and data supplied by User to NYSE Arca, including without limitation, information or data of or related to User's customers and agents. User represents and warrants that, with respect to such information and data (i) User owns or has sufficient rights in and to such information and data to authorize NYSE Arca to perform all of its obligations under this User Agreement with respect thereto and that may be required for User's or NYSE Arca's use of such information, (ii) use or delivery of such information by User or NYSE Arca will not violate the proprietary rights (including, without limitation, any privacy rights) of any party, and (iii) use or delivery of the information by User or NYSE Arca will not violate any applicable law or regulation.
- (d) <u>Fees.</u> User will pay when due all amounts payable to third parties ansing from User's access to NYSE Arca. Such amounts include, but are not limited to, applicable exchange and regulatory fees.
- (e) <u>Sponsored Participants</u>. Notwithstanding NYSE Arca's execution and delivery to User of a copy of this Agreement, if User is a Sponsored Participant, and not an ETP Holder, as a condition to initiating and continuing access to NYSE Arca, (i) User must enter into and maintain customer agreements with one or more Sponsoring ETP Holders establishing proper relationship(s) and account(s) through which User may trade on NYSE Arca. Such customer agreement(s) must incorporate the Sponsorship Provisions set forth in NYSE Arca Equities Rules.
- (f) Order Designation. All orders other than orders entered into NYSE Arca by a Sponsored Participant, and any trades resulting there from shall be the responsibility of the ETP Holder from which they originated.

2. NYSE Arca RULES.

(a) <u>Compliance with NYSE Arca Equities Rules</u>. User represents and warrants that: (i) it will use NYSE Arca only if and when it is duly authorized to use NYSE Arca pursuant to NYSE Arca Equities Rules and User is an ETP Holder or User is a Sponsored Participant; (ii) it will only use NYSE Arca in compliance with NYSE Arca Equities Rules; and, (iii) it is and will remain responsible for its use of NYSE Arca and the use of NYSE Arca by any of its employees, customers, and agents or by any Sponsored Participants whose use of NYSE Arca is sponsored by the User; (iv) it will maintain and keep current a list of all Authorized Traders who may obtain access to NYSE Arca on behalf of the User and/or the User's Sponsored Participant(s); and (v) it will familiarize all Authorized Traders with all of User's obligations under this Agreement and will assure that they receive appropriate training prior to any use or access to NYSE Arca.

- (b) <u>Monitoring</u>. User acknowledges and agrees that NYSE Arca Equities will monitor the use of NYSE Arca by User for compliance with all applicable laws and regulations, including, without limitation, NYSE Arca Equities Rules. User acknowledges its responsibility to monitor its employees, agents and customers for compliance with NYSE Arca Equities Rules, the rules and regulations of any self-regulatory organizations of which User is a member and all applicable federal and state laws.
- (c) Integrity of NYSE Arca. User will not (i) materially alter the information or data supplied to or received from NYSE Arca in violation of NYSE Arca Equities Rules, (ii) materially affect the integrity of the information or data supplied to or received from NYSE Arca, or (iii) supply or render information or data to or from NYSE Arca that is illegal, inaccurate, unfair, uninformative, fictitious, misleading or discriminatory. User will not permit its employees, agents or customers to interfere with or adversely affect NYSE Arca or any use thereof by any other authorized individuals or entities.
- (d) <u>Indemnity</u>. User agrees to indemnify, defend and hold NYSE Arca, NYSE Arca, Inc. and NYSE Arca Equities harmless from and against any and all claims, demands, losses, costs, expenses, obligations, liabilities, damages, recoveries, and deficiencies, including interest, penalties, and attorneys' fees, arising from or as a result of User's breach of its obligations under this User Agreement or otherwise from its use of NYSE Arca.

3. CHANGE OF NYSE Arca, LLC.

User acknowledges and agrees that nothing in this User Agreement constitutes an understanding by NYSE Arca to continue any aspect in its current form. NYSE Arca may from time to time make additions, deletions or modifications to NYSE Arca. User acknowledges and agrees that NYSE Arca may temporarily or permanently, unilaterally condition, modify or terminate the right of any individuals or entities to access, receive or use NYSE Arca in accordance with NYSE Arca Equities Rules. Further, NYSE Arca may temporarily or permanently terminate the right of any individuals or entities to access NYSE Arca at any time if so instructed by NYSE Arca Equities.

4. OWNERSHIP.

User acknowledges and agrees that all patents, copyrights, trade secrets, trademarks and other property rights in or related to NYSE Arca and the information and data made available through NYSE Arca (including compilation rights in information and data) are and will remain the exclusive property of NYSE Arca or its licensors. User will attribute the source as appropriate under all circumstances.

5. INFORMATION.

- (a) <u>Confidentiality</u>. Both parties acknowledge that (i) NYSE Arca and the information and data made available therein, incorporate confidential and proprietary information developed, acquired by or licensed to NYSE Arca, including confidential information of NYSE Arca Equities or other entities, and (ii) each party may receive or have access to other proprietary or confidential information disclosed and marked as confidential by the disclosing party (collectively, the "Information"). The receiving party will use the disclosing party's Information solely to perform its obligations under this User Agreement. The receiving party will take all precautions necessary to safeguard the confidentiality of the disclosing party's Information, including without limitation, (i) those taken by the receiving party to protect its own confidential information and (ii) those which the disclosing party may reasonably request from time to time.
- (b) <u>Disclosure</u>. The receiving party will not disclose, in whole or in part, the disclosing party's Information to any person, except as specifically authorized under this User Agreement. User may not disclose any data or compilations of data made available to User by NYSE Arca without the express, prior written authorization of NYSE Arca. User acknowledges that any and all information provided to NYSE Arca by the User will be disclosed to NYSE Arca Equities for use in accordance with NYSE Arca Equities Rules. User hereby consents to such disclosure. NYSE Arca may also disclose Information in accordance with its regulatory obligations.
- (c) <u>Unauthorized Use or Disclosure</u>. The parties acknowledge that any unauthorized use or disclosure of the disclosing party's Information may cause irreparable damage to the disclosing party. If an unauthorized use or disclosure occurs, the receiving party will immediately notify the disclosing party and take at its expense all steps necessary to recover the disclosing party's Information and to prevent its subsequent unauthorized use or dissemination, including availing itself of actions for seizure and injunctive relief. If the receiving party fails to take these steps in a timely and adequate manner, the disclosing party may take them at the receiving party's expense, and the receiving party will provide the disclosing party with its reasonable cooperation in such actions that the disclosing party may request.
- (d) <u>Limitation</u>. The receiving party will have no confidentiality obligation with respect to any portion of the disclosing party's Information that (i) the receiving party independently developed before receiving the Information from the disclosing party, (ii) the receiving party lawfully obtained from a third party under no obligation of confidentiality, (iii) is or becomes available to the public other than as a result of an act or omission of the receiving party or any of its employees or (iv) the receiving party is compelled to disclose pursuant to legal process provided by a court of competent jurisdiction or other governmental entity to whose jurisdiction the receiving party is subject.

6. DISCLAIMER OF WARRANTY.

NYSE Arca IS MADE AVAILABLE "AS IS" AND WITHOUT WARRANTY OF ANY KIND. ALL WARRANTIES, CONDITIONS, REPRESENTATIONS, INDEMNITIES AND GUARANTEES WITH RESPECT TO THE NYSE Arca AND ANY DATA, SOFTWARE OR INFORMATION MADE AVAILABLE THEREIN BY NYSE Arca, NYSE Arca EQUITIESOR ITS OR THEIR LICENSORS, WHETHER EXPRESS, IMPLIED, OR STATUTORY, ARISING BY LAW, CUSTOM, PRIOR ORAL OR WRITTEN STATEMENTS BY NYSE Arca, NYSE Arca EQUITIES OR ITS OR THEIR AGENTS, AFFILIATES, LICENSORS OR OTHERWISE (INCLUDING, BUT NOT LIMITED TO ANY WARRANTY OF SATISFACTORY QUALITY, ACCURACY, UNINTERRUPTED USE, TIMELINESS, TRUTHFULNESS, SEQUENCE, COMPLETENESS, MERCHANTABILITY, FITNESS FOR PARTICULAR PURPOSE OR NON-INFRINGEMENT AND ANY IMPLIED WARRANTIES ARISING FROM TRADE USAGE, COURSE OF DEALING OR COURSE OF PERFORMANCE) ARE HEREBY OVERRIDDEN, EXCLUDED AND DISCLAIMED.

7. NO LIABILITY FOR TRADES.

USER UNDERSTANDS AND AGREES THAT (I) NYSE Arca IS NOT DIRECTLY OR INDIRECTLY A PARTY TO OR A PARTICIPANT IN ANY TRADE OR TRANSACTION ENTERED INTO OR OTHERWISE CONDUCTED THROUGH NYSE Arca, AND (II) NYSE Arca IS NOT LIABLE IN ANY MANNER TO ANY PERSON (INCLUDING WITHOUT LIMITATION THE USER AND ANY PERSON FOR WHOM THE USER IS AUTHORIZED TO TRADE OR ACT) FOR THE FAILURE OF ANY PERSON ENTERING INTO A TRADE OR TRANSACT BY

MEANS OF NYSE Arca TO PERFORM SUCH PERSON'S SETTLEMENT OR OTHER OBLIGATIONS UNDER SUCH TRADE OR TRANSACTION. NEITHER NYSE Arca, NYSE Arca EQUITIES, OR ITS OR THEIR AGENTS, AFFILIATES OR LICENSORS WILL BE LIABLE FOR ANY LOSSES, DAMAGES, OR OTHER CLAIMS, ARISING OUT OF NYSE Arca OR ITS USE. ANY LOSSES, DAMAGES, OR OTHER CLAIMS, RELATED TO A FAILURE OF NYSE Arca TO DELIVER, DISPLAY, TRANSMIT, EXECUTE, COMPARE, SUBMIT FOR CLEARANCE AND SETTLEMENT, OR OTHERWISE PROCESS AN ORDER, MESSAGE, OR OTHER DATA ENTERED INTO, OR CREATED BY, NYSE Arca WILL BE ABSORBED BY THE USER OR THE ETP HOLDER SPONSORING THE USER, THAT ENTERED THE ORDER, MESSAGE OR OTHER DATA INTO NYSE Arca. IF THIS SECTION IS DEEMED TO CONFLICT WITH ANY OTHER SECTION OF THIS USER AGREEMENT, THIS SECTION WILL SUPERCEDE SUCH OTHER SECTION.

8. NO CONSEQUENTIAL DAMAGES.

UNDER NO CIRCUMSTANCES WILL NYSE Arca, NYSE Arca EQUITIES OR ITS OR THEIR AGENTS, AFFILIATES OR LICENSORS BE LIABLE FOR ANY LOSS, DAMAGE, CLAIM OR EXPENSE, INCLUDING WITHOUT LIMITATION ANY DIRECT, CONSEQUENTIAL, INDIRECT, SPECIAL, PUNITIVE OR INCIDENTAL DAMAGES OR LOST PROFITS, WHETHER FORESEEABLE OR UNFORESEEABLE, BASED ON USER'S CLAIMS OR THE CLAIMS OF ITS CUSTOMERS, EMPLOYEES OR AGENTS (INCLUDING, BUT NOT LIMITED TO, CLAIMS FOR LOSS OF DATA, GOODWILL, USE OF MONEY OR USE OF NYSE Arca, INTERRUPTION IN USE OR AVAILABILITY NYSE Arca, STOPPAGE OF OTHER WORK OR IMPAIRMENT OF OTHER ASSETS), ARISING OUT OF BREACH OR FAILURE OF EXPRESS OR IMPLIED WARRANTY, BREACH OF CONTRACT, MISREPRESENTATION, NEGLIGENCE, STRICT LIABILITY IN TORT OR OTHERWISE. THIS SECTION WILL NOT APPLY ONLY WHEN AND TO THE EXTENT THAT APPLICABLE LAW SPECIFICALLY REQUIRES LIABILITY, DESPITE THE FOREGOING EXCLUSION AND LIMITATION.

9. TERM AND TERMINATION.

This User Agreement will be effective as of the Effective Date and will remain in effect thereafter until terminated by either party upon notice to the other party. Termination will be effective at the close of trading in the affected markets and applications on the day that notice of termination is received by the other party hereto. NYSE Arca may terminate this User Agreement immediately if (i) the User is in breach of this User Agreement for any reason, (ii) any representations made by the User in connection with this User Agreement are or become false or misleading or (iii) NYSE Arca is notified that User is no longer an ETP Holder or Sponsored Participant in good standing with NYSE Arca Equities or otherwise is no longer authorized to access NYSE Arca. Upon the termination of this User Agreement for any reason, all rights granted to User hereunder will cease. The provisions of Sections 2(d), 5, 6, 7, 8, 9, and 12 will survive the termination or expiration of this User Agreement for any reason. In no event will termination of this User Agreement relieve User of any obligations incurred through its use of NYSE Arca.

10. ASSIGNMENT.

User shall not assign, delegate or otherwise transfer this User Agreement or any of its rights or obligations hereunder without NYSE Arca's prior approval, which will not be unreasonably withheld. NYSE Arca may assign or transfer this User Agreement or any of its rights or obligations hereunder to a related or unrelated party upon notice to User.

11. FORCE MAJEURE.

Notwithstanding any other term or condition of this User Agreement to the contrary, neither NYSE Arca nor User will be obligated to perform or observe their obligations undertaken in this User Agreement if prevented or hindered from doing so by any circumstances found to be beyond their control.

12. MISCELLANEOUS.

All notices or approvals required or permitted under this User Agreement must be given in writing to the address specified above. Any waiver or modification of this User Agreement will not be effective unless executed in writing and signed by the other party. This User Agreement will bind each party's successors-in-interest. This User Agreement will be governed by and interpreted in accordance with the internal laws of the State of New York, USA. All disputes, claims or controversies between the parties hereto will be submitted to arbitration in New York, New York pursuant to the applicable NYSE Arca Equities Rules, if permissible under such rules, and otherwise under the rules of the American Arbitration Association; provided, however, that nothing herein will prevent NYSE Arca from seeking interim injunctive relief in any court of competent jurisdiction. Both parties submit to the non-exclusive jurisdiction of the state and federal courts in and for New York, New York, USA for the resolution of any dispute arising under this User Agreement. If any provision of this User Agreement is held to be unenforceable, in whole or in part, such holding will not affect the validity of the other provisions of this User Agreement. No action arising out of any claimed breach of this User Agreement may be brought by either party more than one (1) year after the cause of action arose. This User Agreement, together with the applicable NYSE Arca Equities Rules, constitutes the complete and entire statement of all conditions and representations of the agreement between NYSE Arca and User with respect to its subject matter and supersedes all prior writings or understandings.

NYSE Arca ETP Short Form June 2015

SECTION 5- ARCHIPELAGO SECURITIES™ ROUTING AGREEMENT

Provided that User is an ETP Holder or Sponsored Participant of NYSE Arca Equities and subject to a valid, ongoing User Agreement with NYSE Arca, LLC; Archipelago Securities, LLC (hereinafter "Archipelago Securities"), a broker-dealer registered in accordance with Section 15(a) of the Securities Exchange Act of 1934, agrees to act as agent to User for the purpose of providing certain routing services, as described herein, provided that User is bound by the terms and conditions of this Routing Agreement and any applicable rules and interpretations of NYSE Arca Equities Rules. Whereas Archipelago Securities provides certain order routing services for NYSE Arca Equities, and User desires to use the order routing facilities of NYSE Arca Equities and NYSE Arca, for good and valuable consideration, User and Archipelago Securities agree as follows:

1. ROUTING SERVICES.

Archipelago Securities, a wholly owned subsidiary of Archipelago Holdings, Inc., agrees to act as agent of the User for routing orders entered into NYSE Arca to the applicable market centers or broker-dealers for execution, whenever such routing is required in accordance with NYSE Arca Equities Rules. User understands and agrees that orders executed on its behalf shall at all times be subject to the terms and conditions of NYSE Arca Equities Rules.

2. ORDERS NOT ELIGIBLE FOR ROUTING SERVICES.

User agrees that Archipelago Securities will not execute any orders that are not eligible for order routing in accordance with NYSE Arca Equities Rules. For example, NYSE Arca Equities Rules may provide that if a User has indicated that an order must not be routed to another market center for execution (i.e., by designating an order as a fill-or-return or fill-or-return plus order), the order will not be eligible for routing services provided by Archipelago Securities.

3. CANCELLATION; MODIFICATION OF ORDERS.

User agrees that any requests regarding cancellation or modification of orders shall be subject to NYSE Arca Equities Rules. User understands that such rules may provide that requests to cancel orders while the order is routed away to another market center and remains outside NYSE Arca will be processed by Archipelago Securities, subject to the applicable trading rules of the relevant market center.

4. TRANSMISSION OF ORDER INSTRUCTIONS.

User agrees that all orders on its behalf must be transmitted to Archipelago Securities through NYSE Arca. User agrees that NYSE Arca is its exclusive mechanism for purposes of transmitting orders on its behalf to Archipelago Securities and for receiving notice regarding such orders. Archipelago Securities shall be entitled to rely upon and act in accordance with any order instructions received from NYSE Arca on behalf of User. User agrees that all order executions effected on behalf of User pursuant to this agreement shall be reported by Archipelago Securities to NYSE Arca. The User shall be notified of such executions through NYSE Arca.

5. CLEARANCE AND SETTLEMENT.

User agrees that all transactions executed on its behalf shall be processed in accordance with NYSE Arca Equities Rules. If User is an ETP Holder, User agrees that orders executed or its behalf by Archipelago Securities shall be automatically processed by NYSE Arca for clearance and settlement on a locked-in basis. If User is a Sponsored Participant, User agrees that all orders executed on its behalf by Archipelago Securities shall be cleared and settled, using the relevant Sponsoring ETP Holder's mnemonic (or its clearing firm's mnemonic as applicable).

6. TERM OF AGREEMENT.

This Routing Agreement will be effective as of the Effective Date and will remain in effect thereafter until terminated by either party upon notice to the other party. Termination will be effective at the close of trading in the affected markets and applications on the day that notice of termination is received by the other party hereto. Archipelago Securities may terminate this Routing Agreement immediately if (i) the User is in breach of this Routing Agreement for any reason, (ii) any representations made by the User in connection with this Agreement or the User Agreement are or become false or misleading or (iii) User is no longer a ETP Holder or Sponsored Participant of NYSE Arca Equities or otherwise authorized to access NYSE Arca. Upon the termination of this Agreement or the User Agreement for any reason, all rights granted to User hereunder will cease. The provisions of Paragraphs 7, 8, 9 and 10 will survive the termination or expiration of this Routing Agreement for any reason. In no event will termination of this Routing Agreement relieve User of any obligations incurred through its use of NYSE Arca.

SECTION 5- ARCHIPELAGO SECURITIES™ ROUTING AGREEMENT (CONTINUED)

7. INDEMNITY.

User agrees to indemnify, defend and hold Archipelago Securities harmless from and against any and all claims, demands, losses, costs, expenses, obligations, liabilities, damages, recoveries, and deficiencies, including interest, penalties, and attorneys' fees, arising from or as a result of User's breach of its obligations under this Agreement or otherwise from its use of the Archipelago Securities routing services.

8. DISCLAIMER OF WARRANTY.

ROUTING SERVICES ARE PROVIDED "AS IS" AND WITHOUT WARRANTY OF ANY KIND. ALL WARRANTIES, CONDITIONS, REPRESENTATIONS, INDEMNITIES AND GUARANTEES WITH RESPECT TO THE ROUTING SERVICE, WHETHER EXPRESS, IMPLIED, OR STATUTORY, ARISING BY LAW, CUSTOM, PRIOR ORAL OR WRITTEN STATEMENTS BY ARCHIPELAGO SECURITIES, NYSE Area EQUITIES OR ITS OR THEIR AGENTS, AFFILIATES, LICENSORS OR OTHERWISE (INCLUDING, BUT NOT LIMITED TO ANY WARRANTY OF SATISFACTORY QUALITY, ACCURACY, UNINTERRUPTED USE, TIMELINESS, TRUTHFULNESS, SEQUENCE, COMPLETENESS, MERCHANTABILITY, FITNESS FOR PARTICULAR PURPOSE OR NON-INFRINGEMENT AND ANY IMPLIED WARRANTIES ARISING FROM TRADE USAGE, COURSE OF DEALING OR COURSE OF PERFORMANCE) ARE HEREBY OVERRIDDEN, EXCLUDED AND DISCLAIMED.

9. NO LIABILITY FOR TRADES.

USER UNDERSTANDS AND AGREES THAT (I) ARCHIPELAGO SECURITIES IS NOT LIABLE IN ANY MANNER TO ANY PERSON (INCLUDING WITHOUT LIMITATION THE USER AND ANY PERSON FOR WHOM THE USER IS AUTHORIZED TO TRADE OR ACT) FOR THE FAILURE OF ANY PERSON ENTERING INTO A TRADE OR TRANSACTION BY MEANS OF NYSE Arca TO PERFORM SUCH PERSON'S SETTLEMENT OR OTHER OBLIGATIONS UNDER SUCH TRADE OR TRANSACTION. NEITHER ARCHIPELAGO SECURITIES, OR ITS AGENTS, AFFILIATES OR LICENSORS WILL BE LIABLE FOR ANY LOSSES, DAMAGES, OR OTHER CLAIMS, ARISING OUT OF THE ROUTING SERVICE OR ITS USE. ANY LOSSES, DAMAGES, OR OTHER CLAIMS, RELATED TO A FAILURE OF ARCHIPELAGO SECURITIES TO DELIVER, DISPLAY, TRANSMIT, EXECUTE, COMPARE, SUBMIT FOR CLEARANCE AND SETTLEMENT, OR OTHERWISE PROCESS AN ORDER, MESSAGE, OR OTHER DATA ENTERED INTO, OR CREATED BY, NYSE Arca WILL BE ABSORBED BY THE USER OR THE ETP HOLDER SPONSORING THE USER, THAT ENTERED THE ORDER, MESSAGE OR OTHER DATA INTO NYSE Arca. IF THIS SECTION IS DEEMED TO CONFLICT WITH ANY OTHER SECTION OF THIS USER AGREEMENT, THIS SECTION WILL SUPERCEDE SUCH OTHER SECTION.

10. NO CONSEQUENTIAL DAMAGES. UNDER NO CIRCUMSTANCES WILL ARCHIPELAGO SECURITIES, NYSE Arca EQUITIES OR ITS OR THEIR AGENTS, AFFILIATES OR LICENSORS BE LIABLE FOR ANY LOSS, DAMAGE, CLAIM OR EXPENSE, INCLUDING WITHOUT LIMITATION ANY DIRECT, CONSEQUENTIAL, INDIRECT, SPECIAL, PUNITIVE OR INCIDENTAL DAMAGES OR LOST PROFITS, WHETHER FORESEEABLE OR UNFORESEEABLE, BASED ON USER'S CLAIMS OR THE CLAIMS OF ITS CUSTOMERS, EMPLOYEES OR AGENTS (INCLUDING, BUT NOT LIMITED TO, CLAIMS FOR LOSS OF DATA, GOODWILL, USE OF MONEY OR USE OF ROUTING SERVICES, INTERRUPTION IN USE OR AVAILABILITY OF ARCHIPELAGO SECURITIES, STOPPAGE OF OTHER WORK OR IMPAIRMENT OF OTHER ASSETS), ARISING OUT OF BREACH OR FAILURE OF EXPRESS OR IMPLIED WARRANTY, BREACH OF CONTRACT, MISREPRESENTATION, NEGLIGENCE, STRICT LIABILITY IN TORT OR OTHERWISE. THIS SECTION WILL NOT APPLY ONLY WHEN AND TO THE EXTENT THAT APPLICABLE LAW SPECIFICALLY REQUIRES LIABILITY, DESPITE THE FOREGOING EXCLUSION AND LIMITATION.

11. ASSIGNMENT.

User shall not assign, delegate or otherwise transfer this Routing Agreement or any of its rights or obligations hereunder without Archipelago Securities' pnor approval, which will not be unreasonably withheld. Archipelago Securities may assign or transfer this Routing Agreement or any of its rights or obligations hereunder to a related or unrelated party upon notice to User.

12. FORCE MAJEURE.

Notwithstanding any other term or condition of this Routing Agreement to the contrary, neither Archipelago Securities nor User will be obligated to perform or observe their obligations undertaken in this Routing Agreement if prevented or hindered from doing so by any circumstances found to be beyond their control.

SECTION 5-	ARCHIPELA	GO SECURITIES	™ ROUTING	AGREEMENT	(CONTINUI	ED)	
Any waiver or provided that applicable. Thi interpreted in a parties hereto Arca Equities I	approvals required in modification of this agreements of the souting Agreaccordance with will be submitted Rules, constituted in modified in the submitted in t	this Routing Agree t shall at all times ement will bind each the internal laws ed to arbitration in I	ment will not be be interpreted ch party's succe of the State of New York, New d entire statem	e effective unless to effect the rul essors-in-interest New York, USA. York. This Rou ent of all condition	s executed in the sex and interport of the sex and interport of the sex and interport on the sex and interport of the sex	writing and signeretations of NY Agreement will claims or control, together with sentations of the	Iress specified above. ed by the other party, SE Arca Equities, as be governed by and oversies between the the applicable NYSE e agreement between lings.
		ent by an ETP Ho he space provided		effected by init	tialing the U	ser Agreement	for NYSE Arca or,
Accepted on be	ehalf of ETP Ho	older:					•
By (Signature):							
Name:	÷						
Title:							
Date:							

NYSE Arca Equities, Inc.

Equity Trading Permit Application and Contracts

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APPLICATION PROCESS

Filing Requirements

Prior to submitting the <u>Application for Equity Trading Permit ("ETP")</u>, an Applicant Broker-Dealer must file a Uniform Application for Broker-Dealer Registration (Form-BD) with the Securities and Exchange Commission and register with the FINRA Central Registration Depository ("Web CRD®").

Checklist

Applicant Broker-Dealer must complete and submit all applicable materials addressed in the Application Checklist (page 4) to crs@nyse.com.

Note: All application materials sent to NYSE Arca will be reviewed by NYSE Arca's Client Relationship Services ("CRS") Department for completeness. The applications are then submitted to FINRA who performs the application approval recommendation. All applications are deemed confidential and are handled in a secure environment. CRS or FINRA may request applicants to submit documentation in addition to what is listed in the Application Checklist during the application review process, pursuant to NYSE Arca Equities Rule 2.3. If you have questions on completing the application, you may direct them to: Client Relationship Services: Email: crs@nyse.com or (212) 896-2830 option 5.

Application Process

- Following submission of the <u>Application for Equity Trading Permit</u>, fees and supporting documents to NYSE Arca, Inc. ("NYSE Arca"), the application will be reviewed for accuracy and regulatory or other disclosures. NYSE Arca will submit the application to FINRA for review and approval recommendation; NYSE Arca Compliance and Regulation complete the final review and approval.
- Applicant Broker Dealer is required to consult with an NYSE Relationship Manager or CRS Account Manager to determine the
 most beneficial connectivity option. NYSE Arca will then coordinate the connectivity between the Applicant Broker Dealer and the
 Exchange.
- If review of Statutory Disqualification Disclosure information and/or a background investigation indicates that the Applicant Broker-Dealer has an associated person(s) with a possible statutory disqualification, NYSE Arca will contact the representative of the Applicant Broker-Dealer to discuss the statutory disqualification process.
- If it appears that the Applicant Broker-Dealer has outstanding debt, civil judgment actions and/or regulatory disciplinary actions, the Applicant Broker-Dealer will be contacted by NYSE Arca for further information.
- Applicants who have completed and returned all documents without indication of a statutory disqualification, outstanding debt, civil judgment actions and/or regulatory disciplinary actions will be presented to NYSE Arca for approval or disapproval without delay.
 - ✓ Applicant Broker-Dealer will be subject to disciplinary action if false or misleading answers are given pursuant to the Application for Equity Trading Permit.
- NYSE Arca does not accept fingerprint cards. Fingerprint cards must be submitted directly to FINRA within 30 days of filing the Form U4. The fingerprint cards must be cleared by the FBI for individuals who seek to register with NYSE Arca or be approved by NYSE Arca. Firms may request FINRA-approved fingerprint cards through the Gateway Call Center at: (301) 590-6500. Fingerprint cards should be sent directly to: For Regular U.S. Mail: FINRA, Registration and Disclosure Department, P.O. Box 9495, Gaithersburg, MD 20898-9495. P.O. Boxes will not accept courier or overnight deliveries. For Express/Ovemight Mail Delivery: FINRA, Registration and Disclosure Department, 9509 Key West Avenue, Rockville, MD 20850. If a phone number is required for the recipient, provide: (301) 590-6500. Your firm should receive the FBI search results in the "Fingerprint Status Received from FBI Notice Queue" within three business days after the card is sent to the FBI. Additional information regarding the submission of fingerprints to Web CRD may be obtained on the FINRA Web site: https://firms.finra.org/webcrd.
- NYSE Arca will promptly notify the Applicant Broker-Dealer, in writing, of their Membership decision.
- . Once connectivity is established, your Relationship Manager or CRS Account Manager will inform you of your ability to trade.

In the event an Applicant Broker-Dealer is disapproved by NYSE Arca, the Applicant Broker-Dealer has an opportunity to be heard upon the specific grounds for the disapproval, in accordance with the provisions of NYSE Arca Rule 10.13. A disapproved applicant desiring to be heard must, within thirty (30) calendar days of the date upon which the Corporation's decision was mailed to the applicant, file a petition in accordance with the provisions of Rule 10.13

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AP	PLICATION	CHECKLIST & FEES			
DO	CUMENTATIO	ON CHECKLIST FOR NON-NYSE ARCA DEA BROKER-DEALER APPLICANTS			
	Application fo	r Equity Trading Permit			
	0	Sections 1-6, and 8-10 are MANDATORY for all applicants Section 7 if applicant is not self-clearing If self-clearing, a Regional interoffice Operations (RIO) letter will need to be supplied after the Broker-Dealer has been approved.			
u	Form BD, incl	uding Schedules & Disclosure Reporting pages must be up to date and accurate on FINRA's WebCRD®			
	A Form U-4 a	nd Fingerprint cards for the following individuals needs to be submitted directly to the FINRA, if not currently available on Web CRD®			
	0	Direct/Indirect Owners, Allied Persons, and Approved Persons as listed on Form BD Schedules A & B Designated supervisors and principals			
	Financial Doc	umentation			
	o o o	Four (4) Most Recent FOCUS Reports ³ and the Most Recent Audited Financial Statements, if applicable Most Recent Balance Sheet and Capital Computation Six Month Profit/Loss Projection			
u	All examination	on reports and corresponding responses from the Applicant Broker-Dealer for the last two exam reports			
		ol Documents: Articles of Incorporation and Bylaws; Partnership Agreement; Limited Liability Company ("LLC") Agreements; Operating tent; or similar documentation			
	Copy of Writte	en Supervisory Procedures ⁴ , Anti-Money Laundering Procedures, and Insider Trading Act Procedures (if separate)			
DΩ	CUMENTATIO	ON CHECKLIST FOR NYSE ARCA DEA BROKER-DEALER APPLICANTS			
u u		r Equity Trading Permit			
	0	Sections 1-6, and 8-10 are MANDATORY for all applicants Section 7 if applicant is not self-clearing If self-clearing, a Regional interoffice Operations (RIO) letter will need to be supplied after the Broker-Dealer has been approved.			
0	Form BD, incl	uding Schedules & Disclosure Reporting pages must be up to date and accurate on FINRA's WebCRD®			
0	A Form U-4 a	nd Fingerprint cards for the following individuals needs to be submitted directly to the FINRA, if not currently available on Web CRD®			
	0 0 0	Direct/Indirect Owners, Allied Persons, and Approved Persons as listed on Form BD Schedules A & B Designated supervisors and principals All Authorized Traders			
ū		P Form to be completed by persons required to be Approved Persons with the Exchange and for whom the required disclosure tion is not available on Web CRD®.			
	Financial Doc	umentation			
	o o o	Four (4) Most Recent FOCUS Reports ³ and the Most Recent Audited Financial Statements, if applicable Most Recent Balance Sheet and Capital Computation Six Month Profit/Loss Projection Subordination Agreements, if applicable			
	Proprietary A	ccounts of Introducing Broker-Dealers (PAIB) Agreements, if applicable			
	All examination	on reports and corresponding responses from the Applicant Broker-Dealer for the last two exam reports			
ū		al Documents: Articles of Incorporation and Bylaws; Partnership Agreement; Limited Liability Company ("LLC") Agreements; Operating nent; or similar documentation			
	Copy of Written Supervisory Procedures ⁴ , Anti-Money Laundering Procedures, and Insider Trading Act Procedures (if separate)				

Note: All ETP Holders are responsible for maintaining a list of all Authorized Traders, and such list must be made available to NYSE Arca upon request as required by NYSE Arca Equities Rule 7.30(a).

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¹ For a list of fees, please review the "Schedule of Fees and Charges for Exchange Services" found at http://usequities.nyx.com/markets/nyse-arca-equities/trading-fees.

Additional fees to those listed within this application may apply.

A \$125 Investigation Fee may be required for each Control Person, Allied Person, Approved Person, Designated Supervisor or Authorized Trader (DEA Applicants Only) for whom required information is not available on Web CRD®. Please make checks payable to NYSE Arca, Inc.

Applicants must demonstrate that they have current net capital of 140% of their minimum net capital requirement or \$20,000 in excess of their minimum dollar net capital requirement, whichever is greater. If the Broker-Dealer has reported net losses for the period reviewed, the Firm's financial statements must demonstrate that its excess net capital can withstand six (6) consecutive months of average losses. Applicant Broker-Dealers that do not have the requested financial information available are required to submit Pro Forma Financial statements reflecting the Balance Sheet and Profit & Loss Statement detail for each month for the most recent six (6) months or since inception,

whichever is less.

Market Maker applicants must include, but are not limited to, the following NYSE Arca Equity Rules: 6.3 (Prevention of the Misuse of Material, Nonpublic Information), 6.17 (Anti-Money Laundering Compliance Program), 6.18 (Supervision), and 7.20 – 7.25 (Market Makers).

EXPLANATION OF TERMS

For purposes of this application, the following terms shall have the following meanings:

Applicant Broker-Dealer - is the Broker-Dealer organization applying for an Equity Trading Permit or amending this form.

Associated Person - a person who is a partner, officer, director, member of a LLC, trustee of a Business Trust, or employee of an ETP Holder or any person directly or indirectly controlling, controlled by or under common control with an ETP Holder.

Authorized Trader – a person who may submit orders to NYSE Arca, LLC's trading facilities on behalf of his or her ETP Holder or Sponsored Participant.

Clearing Services - a Broker-Dealer who receives and executes customers' instructions, prepares trade confirmations, sends the money related to the trades, arranges for the physical movement of securities, and shares responsibility with an introducing broker-dealer for compliance with regulatory requirements.

Control – (as defined on Form-BD) the power, directly or indirectly, to direct the management or policies of a company, whether through ownership of securities, by contract or otherwise. Any person that (1) is a director, general partner or officer exercising executive responsibility (or having similar status or functions); (2) directly or indirectly has the right to vote 25% or more of a class of a voting security or has the power to sell or direct the sale of 25% or more of a class of voting securities; or (3) in the case of a partnership, has the right to receive upon dissolution, or has contributed, 25% or more of the capital, is presumed to control that company.

Central Registration Depository System ("Web CRD®") – A centralized electronic registration system maintained by FINRA which provides information on registered representatives and principals for members of participant organizations. This database contains employment history, exam scores, licensing information, disciplinary actions, fingerprint results, and other related registration information. NYSE Arca, Inc. is a participant of this system.

Designated Examining Authority ("DEA") – the SEC will designate one Self-Regulatory Organization ("SRO") to be a Broker-Dealer's examining authority, when the Broker-Dealer is a Member or ETP Holder of more than one SRO. Every Broker-Dealer is assigned a DEA, who will examine the Broker-Dealer for compliance with financial responsibility rules.

Designated Supervisor – refers to any person that is a partner, director, or officer exercising executive responsibility (or having similar status or functions) for supervising Authorized Trader(s) ("AT") (as defined in NYSE Arca Equities Rule 1.1(g)).

Direct Owners/Executive Officers – Allied Persons and Approved Persons, as those terms are defined by NYSE Arca Equities Rules 1.1(c) and 1.1(d), respectively, and generally refer to (1) a director, general partner or officer exercising executive responsibility (or having similar status or function); or (2) directly or indirectly has the right to vote 5% or more of a class of voting security or has the power to sell or direct the sale of 5% or more of a class of voting securities; (3) is entitled to receive 5% or more of the net profits; (4) in the case of a partnership, all general partners and those limited and special partners that have the right to receive upon dissolution or have contributed, 5% or more of the capital; or (5) in the case of a LLC, those members that have the right to receive upon dissolution, or have contributed, 5% or more of the LLC's capital, and if managed by elected managers, all elected managers.

ETP or ETP Holder—an Equity Trading Permit issued by the Corporation for effecting approved securities transactions on the Corporation's trading facilities. An ETP may be issued to a Sole Proprietor, Partnership, Corporation, LLC or other organization which is a registered Broker or Dealer, pursuant to Section 15 of the Securities Exchange Act of 1934, as amended, and which has been approved by the Corporation.

Financial Arrangement – (1) the direct financing of an ETP Holder's dealings upon the Exchange; (2) any direct equity investment or profit sharing arrangement; or (3) any consideration over the amount of \$5,000.00 including, but not limited to, gifts, loans, annual salaries or bonuses.

Market Maker -is obligated to maintain continuous two-sided Q Orders in those securities in which the Market Maker is registered to trade, pursuant to NYSE Arca Equities Rule 7.23(a).

Market Maker Authorized Trader ("MMAT") – an authorized trader who performs market-making activities pursuant to Rule 7, on behalf of a Market Maker.

NYSE Arca, Inc. ("NYSE Arca" or the "Corporation") – a Delaware corporation as described in the Corporation's Certificate of Incorporation and Bylaws. NYSE Arca is a national securities exchange as that term is defined by Section 6 of the Securities Exchange Act of 1934, as amended. NYSE Arca, Inc. is the Self-Regulatory Organization for NYSE Arca, LLC

NYSE Arca, LLC - The equities marketplace and a trading facility of NYSE Arca, Inc.

NYSE Arca Equities - NYSE Arca Equities, Inc. (a wholly owned subsidiary of NYSE Arca, Inc.).

Primary Business – refers to greater than 50% of the ETP Holder's business.

Self-Regulatory Organization ("SRO") - each exchange or national securities association is an SRO. Each SRO must have rules that provide for the expulsion, suspension and other discipline of member Broker-Dealers for violation of the SRO's rules.

NYSE Arca Equities, Inc.

Equity Trading Permit Application and Clearing Letter of Consent

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SECTION 1 - ORGANIZATIONAL PROFILE					
Date:	SEC	#:	CRD#	# :	MPID: (If NASDAQ Participant)
		Application		Amer	ndment
GENERAL INFORMATION					
Name of Applicant Broker-Dea	ler:				
Business Address:					
	City:			State:	Zip Code:
Business Phone:			Fax:		****
Contact Name:			Title:		
Phone:			Fax:		
Email Address:			.		
TYPE OF ORGANIZATION					
☐ Corporation	Lin	nited Liability Company	ı	☐ Pa	rtnership
TYPE OF BUSINESS TO B	E CONDU	CTED WITH EQUITY	TRADIN	G PER	MiT (Check all that apply)
☐ Market Maker*	☐ Pu	blic Customer Busines	s	☐ Cle	earing Services
Other					
* Please also complete Application	for Market Ma	ker/Odd Lot Dealer Regis	tration		
OTHER BUSINESS ACTIV	TIES CON	DUCTED BY APPLI	CANT BR	OKER	_DEALER (Check all that apply)
☐ Investment Banking	ı 🗆 Pu	blic Customer Busines	S	☐ Op	tions Market Making
☐ Proprietary Trading	☐ Ot	her			
OTHER SELF-REGULATO	RY ORGAI	NIZATION MEMBER	SHIPS (C	Check a	all that apply)
☐ American Stock Ex	change (AMI	EX)		□ Во	ston Stock Exchange (BSE)
☐ Chicago Board Opt	ions Exchan	ge (CBOE)	•	☐ Ch	icago Stock Exchange (CHX)
☐ National Stock Excl	National Stock Exchange (NSX)			☐ Int	ernational Securities Exchange (ISE)
☐ Financial Industry F	Regulatory A	uthority, Inc. (FINRA)		☐ Ne	w York Stock Exchange (NYSE)
☐ Philadelphia Stock	Exchange (P	HLX)		□ ва	NTS (BATS)
☐ Nasdaq Stock Mark					
APPLICANT'S DESIGNAT	ED EXAMII	NING AUTHORITY ('DEA")		
☐ NYSE Arca, Inc. (N	YSE Arca / N	NYSE Arca Equities)		☐ Otl	her

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SECTION 2 - MEMBERSHIP AGREEMENT	
Applicant Broker-Dealer agrees to abide by the Bylaws and Rules of NYSE Acirculars, notices, interpretations, directives or decisions adopted by NYSE A	
Applicant Broker-Dealer authorizes any SRO, commodities exchange, gover upon its request, any information that such person may have concerning the Broker-Dealer or its associated persons, and releases such person or entity Applicant Broker-Dealer authorizes NYSE Arca to make available to any gov similar entity, any information it may have concerning the Applicant Broker-C from any and all liability in furnishing such information.	ability, business activities, and reputation of Applicant from any and all liability in fumishing such information. vernmental agency, SRO, commodities exchange or
Applicant Broker-Dealer acknowledges its obligation to update any and all in including termination of membership with another SRO, which may cause a understood that in that event, additional information may be required by NYS	change in the Applicant Broker-Dealer's DEA. It is
Applicant Broker-Dealer	
Signature of Authorized Officer, Partner, Managing Member, or Sole Proprietor	Date
Print Name of Authorized Officer, Partner, Managing Member, or Sole Proprietor	Title

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SECTION 3 – FINANCIAL DISCLOSURE
FINANCIAL STATEMENT
Copies of the required financial items as noted on the checklist including: the four (4) most recent FOCUS Reports ⁵ and most recent Audited Financial Statements, and all examination reports and corresponding responses.
SOURCE OF CAPITAL
Explain the source of Applicant Broker-Dealer's Capital
PROPRIETARY ACCOUNTS OF INTRODUCING BROKER-DEALERS (PAIB)
Do you hold a Proprietary Account as an Introducing Broker-Dealer (PAIB)
*If Yes: An introducing Broker-Dealer must notify its DEA in writing when it has entered into a PAIB Agreement with a clearing Broker-Dealer regarding the net capital treatment of assets held in proprietary accounts. Assets (cash and securities) held in trading accounts without a PAIB Agreement are considered to be non-allowable in the computation of net capital under SEC Rule 15c3-1. If NYSE Arca will be your DEA, please enclose a copy of all PAIB Agreements you have entered into with a clearing broker-dealer.
SUBORDINATED LOANS
Have any subordinated loans been made to Applicant Broker-Dealer? Yes (Explain below) No
FINANCIAL OR CONTROLLING INTERESTS
Does the Applicant Broker-Dealer have a financial or controlling (as defined in Form-BD) interest (through direct or indirect stock or bond ownership, through outstanding loans, or otherwise) in any organization engaged in a securities, financial or related business? Yes (Explain below) No
FINANCIAL ARRANGEMENT
Does the Applicant Broker-Dealer have a financial arrangement with any other Broker-Dealer?
☐ Yes (Explain below) ☐ No
Type of Arrangement: Direct Equity Investment Any consideration over \$5,000 Direct Financing Other
Terms of Arrangement (include the names of all participants in the arrangement, and the nature and terms of the arrangement):
OUTSTANDING DEBT (Check all that apply)
Does the Applicant Broker-Dealer owe money to any of the following?
☐ Any NYSE Arca member or member organization or NYSE Arca ETP Holder
Any other national securities or commodities exchange or national securities association
Any member of any other national securities or commodities exchange or national securities association
Explain to whom the money is owed and the dollar amount. Attach a copy of arrangements made for repayment of this debt and evidence of an agreement of repayment.
□ No, the Applicant Broker-Dealer does not owe money to any of the above referenced persons or entities.

⁵ Applicant Broker-Dealers that do not have the requested financial information available are required to submit Pro Forma Financial statements for the most recent six (6) months or since inception, whichever is less.

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Please list the following individuals: (A) each Allied Person as defined in NYSE Arca Equities Rule 1.1(c) ⁸ ; (B) each Approved Person as defined in NYSE Arca Equities Rule 1.1(d) ⁷ ; and (C) each Person as defined in NYSE Arca Equities Rule 6.18(b)(2) ⁸ . You may submit multiple copies of this form, if needed, or attach a copy of Schedule A and Schedule B of Form BD. For individuals required to be disclosed pursuant to (A), (B), or (C) above who do not have required information						
<u>available on</u>	Web C	RD®, the App	licant may be required to	subm	it an investigation fee of \$12	5 per individual.
APPLYING	3 AS:		ALLIED PERSON		APPROVED PERSON	
Name:			Title:	_		CRD#
Firm Name::			Phone	e: _		<u></u>
		Designated S	Supervisor of Authorized T	raders		
Email:						
		Form U4 and	I fingerprint information ⁸ is	curren	t and accessible for this persor	n on Web CRD™
APPLYING	G AS:		ALLIED PERSON		APPROVED PERSON	
Name:			Title:			CRD#
Firm Name::			Phone	e: _		
		Designated S	Supervisor of Authorized T	raders		
Email:						
		Form U4 and	fingerprint information ⁸ is	curren	t and accessible for this persor	n on Web CRD™
APPLYIN	G AS:		ALLIED PERSON		APPROVED PERSON	
Name:			Title:	_		CRD#
Firm Name::			Phone	e: _		
		Designated S	Supervisor of Authorized T	raders		
Email:						
		Form U4 and	d fingerprint information ⁸ is	curren	t and accessible for this persor	n on Web CRD™
APPLYIN	G AS:		ALLIED PERSON		APPROVED PERSON	
Name:			Title:	_		CRD#
Firm Name::			Phone	e: _		<u></u>
		Designated S	Supervisor of Authorized T	raders		
Email:						
		Form U4 and	d fingerprint information ⁸ is	curren	t and accessible for this persor	n on Web CRD™

Pursuant to NYSE Arca Equities Rule 1.1(d), the term "Approved Person" shall refer to a person who is not an ETP Holder, nor an employee or an Allied Person of an ETP Holder, and who: (1) is a director of an ETP Holder, or (2) controls an ETP Holder, or (3) beneficially owns, directly or indirectly, 5% or more of the outstanding equity securities of an ETP holder, or (4) has contributed 5% or more of the partnership capital; and who has been approved by the Composition as an Approved Person

⁶ Pursuant to NYSE Arca Equities Rule 1.1(c), the term "Allied Person" shall refer to an individual, who is: (1) an employee of an ETP Holder who controls such firm, or (2) an employee of an ETP Holder corporation who is a director or a principal executive officer of such corporation, or (3) an employee of an ETP Holder limited liability company who is a manager or a principal executive officer of such limited liability company, or (4) a general partner in an ETP Holder partnership; and who has been approved by the Corporation as an Allied Person.

approved by the Corporation as an Approved Person.

NYSE Arca Equities Rule 6.18(b)(2) refers to the designation of a person with authority to reasonably discharge his/her duties and obligations in connection with supervision and control of the activities of the Associated Persons of the ETP Holder. Pursuant to NYSE Arca Equities Rule 1.1(f), the term "Associated Person" shall refer to a person who is a partner, Officer, director, member of a limited liability company, trustee of a business trust, employee of an ETP Holder or any person directly or indirectly controlling, controlled by or under common control with an ETP Holder.

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SECTIO	ON 5 - STATUTORY DISQUALIFICATION DISCLOSURE	
condition Holder fo	t to the Securities Exchange Act of 1934, as amended ("the Act") 1) trading privileges or may bar a natural person from becoming a 2 por the same reasons that the Securities and Exchange Commission 2 e Act provides for Statutory Disqualification if a person has:	ssociated (or may condition an association) with an ETP
•	Been expelled, barred or suspended from membership in or beir organization;	g associated with an member of a self regulatory
•	had broker, dealer or similar privileges denied or suspended or c Violated any provision of the Act; or	aused such denial or suspension of another;
•	Been convicted of a theft or securities related misdemeanor or a membership status or becoming an Associated Person.	ny felony within ten (10) years of the date of applying for
	Check here if you DO NOT have person(s) associated with the A Disqualification.	pplicant Broker-Dealer who is or may be subject to Statutory
	Check here if you DO have person(s) associated with the Applic Disqualification.*	ant Broker-Dealer who is or may be subject to Statutory
Addition	dentify any such person(s) associated with the Applicant Broker-Eally, identify any such person(s) who are associated with the Applion or continued association by another SRO due to a Statutory E	icant Broker-Dealer and who have been approved for
* Attach	 a sheet identifying any such person(s), including the following inf 1. Name of the person(s). 2. Copies of documents relating to the Statutory Disqualification 3. Description of each such person's duties (for non-registered i position allows access to books, records, funds or securities). 	
,	4. Explanation of action taken or approval given by any other Sf	O regarding each person.
documer pursuan NYSE A immedia will be si obligatio	(Applicant Brokerand the above and the attached information, and that the answers rits) are true and complete to the best of my knowledge. I acknow to this Notice in order to preliminarily approve or deny Applicant rica will also perform a complete background check of Applicant Extely revoked by NYSE Arca depending on the results of such background disciplinary action if false or misleading answers are gen of Applicant Broker-Dealer to submit to NYSE Arca any amend ground but not limited to this Notice, within ten (10) business days of su	rledge that NYSE Arca shall rely on the information provided Broker-Dealer's application for trading privileges, but that roker-Dealer, and such trading privileges may be kground check. I understand that Applicant Broker-Dealer ven pursuant to this Notice. I also acknowledge the ment to any document submitted as part of its application,
Signa Propi	ature of Authorized Officer, Partner, Managing Member, or Sole ietor	Date
Print Propi	Name of Authorized Officer, Partner, Managing Member, or Sole rietor	Title

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SECTION 6 - SUPERVISION

Each ETP Holder must identify the person(s) that is a member, partner, director, or officer exercising executive responsibility (or having similar status or functions) for supervising an Authorized Trader(s) as defined in NYSE Arca Equities Rule 1.1(g). ETP Holders must provide a copy of their Written Supervisory Procedures ("WSP") with their Application.

Name and Title of F	Person responsible	for maintaining WSP:	\$:	

NYSE Arca Equities Rules state:

- (a) Adherence to Law No Equity Trading Permit Holder or Associated Person of an Equity Trading Permit Holder may engage in conduct in violation of the federal securities laws, the Constitution or the Rules of the Exchange. Every Equity Trading Permit Holder must supervise persons associated with the Equity Trading Permit Holder as to assure compliance therewith.
- (b) Supervisory System Each Equity Trading Permit Holder for whom NYSE Arca is DEA must establish and maintain a system to supervise the activities of its associated persons and the operations of its business. Such system must be reasonably designed to ensure compliance with applicable federal securities laws and regulations and NYSE Arca Equities Rules. Final responsibility for proper supervision will rest with the Equity Trading Permit Holder. The Equity Trading Permit Holder's supervisory system must provide, at a minimum, for the following:
 - (1) The establishment and maintenance of written procedures as required by paragraph (c) of this Rule.
 - (2) The designation of a person with authority to reasonably discharge his/her duties and obligations in connection with supervision and control of the activities of the associated persons of the Equity Trading Permit Holder.
 - (3) The Equity Trading Permit Holder must undertake reasonable efforts to determine that all supervisory personnel are qualified by virtue of experience or training to carry out their assigned responsibilities.
 - (4) Each Equity Trading Permit Holder must designate and specifically identify to NYSE Arca one or more persons who will be responsible for such supervision.
- (c) Written Procedures Each Equity Trading Permit Holder must establish, maintain, and enforce written procedures to supervise the business in which it engages and to supervise the activities of its associated persons that are reasonably designed to ensure compliance with applicable federal securities laws and regulations, and with NYSE Arca Equities Rules.

Pursuant to this rule, WSPs should describe the following:

- Specific identification of the individual(s) responsible for supervision either by name or by title and position.
- The supervisory steps and reviews to be taken by the appropriate supervisor this process should identify any exception reports
 and/or other documents being reviewed and the substantive area being reviewed (e.g., limit order protection, trade reporting,
 etc.). If an ETP Holder employs automated systems as part of its supervisory system, those systems should also be generally
 described.
- The frequency of such reviews this should be more specific than simply providing for "a review" or a "review from time to time." The frequency of reviews should be described (i.e., daily, weekly, monthly, quarterly, or annually).
- How reviews will be documented, for example, initialing order tickets or filling out review logs. The procedures should also
 provide for the documentation of steps taken as a result of supervisory reviews.

For Market Makers, the WSPs and supervisory systems of firms engaged in market making activities must address, at a minimum, trading practice rules (i.e., passive market making, firm quote rule compliance, limit order protection), trading systems, trade reporting, rules compliance and any other material aspect of the firm's market making business. WSPs should include the following subject areas:

- Size conventions
- Coordination of quotations, trades and trade reports
- Improper collaboration and coordination of Market Maker activities
- Failure to honor quotations
- Harassment
- · Late and inaccurate trade reporting

ALL EQUITY TRADING PERMIT HOLDERS MUST KEEP ABREAST OF CHANGES IN LAWS, RULES AND REGULATIONS, MARKET PRACTICES AND INDICATED PATTERNS OF NON-COMPLIANCE AND MUST MODIFY THEIR SUPERVISORY PROCEDURES AND SYSTEMS AS NECESSARY.

SECTION 7 – CLEARING LETTER OF CONSENT				
Notice of Consent – To be completed b	y Clearing ETP Holder of Application Broker-Dealer			
The undersigned hereby represents the clearing agency named below, a member of the National Securities Clearing Corporation ("NSCC"), and an approved ETP Holder of NYSE Arca, LLC, a facility of NYSE Arca.				
The undersigned Clearing ETP Holder hereby agrees to accept full financial responsibility for all transactions effected through and carried in all accounts held by the following Applicant Broker-Dealer with the clearing agency:				
Applicant Broker-Dealer	CRD# and/or SEC File#			
Rules and may be relied upon by NYSE Arca E	ntee, letter of authorization, or notice of consent pursuant to NYSE Arca Equities Equities, NYSE Arca, Inc., the NSCC, and their respective members. This Notice of es Rules, as amended from time to time, and shall remain in effect until revoked in			
Clearing ETP Holder (Broker-Dealer Name)				
Clearing ETP Holder (NSCC Clearing #)	-			
Signature of Authorized Officer, Partner or Managing Member of Clearing ETP Holder	Signature of Authorized Officer, Partner or Managing Member, or Sole Proprietor of ETP Holder			
Print Name / Title	Print Name / Title			
Date	Date			

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NYSE Arca Equities, Inc.

Contracts

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SECTION 8 - NYSE Arca SM USE	R AGREEMENT					
by and between NYSE Arca, a De Chicago, IL 60606 and the User, a for securities. NYSE Arca will pro	elaware corporation, with its principal offices loo as identified below. NYSE Arca operates an ex ovide User with the services of NYSE Arca purs of the Certificate of Incorporation, Bylaws, Rules	ate executed by NYSE Arca, LLC. (hereinafter "NYSE Arca"), is made the its principal offices located at 100 S. Wacker Drive, Suite 1800, SE Arca operates an exchange trading facility of NYSE Arca Equities rices of NYSE Arca pursuant to the terms of this User Agreement. poration, Bylaws, Rules and Procedures of NYSE Arca Equities, as				
		·				
User:						
Business Address:						
Corporate Form:						
State of Incorporation:		_				
Telephone:	Primary Contact:					
Fax:	Email:					
hereto and incorporated herein by referinitialed the space below. In witness whereof, the parties hereby	vices pursuant to the User Agreement General Terence. The following Agreement will be incorporate or the following Agreement will be incorporate or cause this User Agreement to be executed by a of and has the same effect as signature on each	prated herein by reference, if the User has their duly authorized representatives.				
(Print Company Name)						
By (Signature):	By (Signature):					
Name:	Name:					
Title:	Title:					
Date:	Date:					
With Notices To:						
User Name:	•	NYSE Arca, Inc.				
Contact Name:		Attention: Client Relationship Services				
		100 S. Wacker Drive, Suite 1800				
City, State, Zip:		Chicago, IL 60606				

Provided that User is an authorized ETP Holder (as defined herein) or a Sponsored Participant (as defined herein) in good standing with NYSE Arca and has paid the requisite fees, NYSE Arca will provide User with access pursuant to these general terms and conditions, which User hereby acknowledges and accepts. User agrees to abide by these general terms and conditions and be bound by the Certificate of Incorporation, Bylaws, Rules and Procedures of NYSE Arca Equities, as amended from time to time, ("NYSE Arca Equities Rules") with respect to NYSE Arca.

For purposes of this Agreement, an "ETP" shall refer to an Equity Trading Permit issued by NYSE Arca Equities for effecting approved securities transactions on NYSE Arca. An "ETP Holder" shall refer to a Sole Proprietorship, Partnership, Corporation, LLC or other organization in good standing that has been issued an ETP in accordance with NYSE Arca Equities Rules. A Sponsored Participant shall refer to a person that has entered into a sponsorship arrangement with an ETP Holder (a "Sponsoring ETP Holder") as described in Section 1(e) below. An Authorized Trader shall refer to a person authorized to submit orders to NYSE Arca on behalf of his or her User. As used in this Agreement, the requirement that a User "comply with NYSE Arca Equities Rules" or "act in compliance with NYSE Arca Equities Rules" (or such other similar phrases) shall mean, with respect to a Sponsored Participant, that such Sponsored Participant shall comply with NYSE Arca Equities Rules as if it were an ETP Holder.

1. RIGHTS AND OBLIGATIONS.

- (a) NYSE Arca, LLC ("NYSE Arca"). Pursuant to the terms and conditions of this User Agreement, NYSE Arca grants the User a personal, non-exclusive, non-transferable right to access NYSE Arca solely for the intended purpose and only in accordance with the then-current NYSE Arca Equities Rules. For purposes of this User Agreement, the "intended purpose" is to place orders with NYSE Arca for execution and to receive information from NYSE Arca about such orders. The User is solely and exclusively responsible for any hardware, software, communication equipment, communication services, information formatting requirements or other items or services necessary for accessing and using NYSE Arca.
- (b) Restrictions on Use; Security. User may not sell, lease, furnish or otherwise permit or provide access to NYSE Arca or any information or data made available therein to any other entity or to any individual that is not User's employee, customer or agent or a User's Sponsored Participant. User accepts full responsibility for its employee's, customers', and agent's use of NYSE Arca, including any Sponsored Participants' use, which use must comply with NYSE Arca Equities Rules and the User's obligations under this User Agreement. User will take reasonable security precautions to prevent unauthorized use of or access to NYSE Arca, including unauthorized entry of information into NYSE Arca, or the information and data made available therein. User understands and agrees that User is responsible for any and all orders, trades and other messages and instructions entered, transmitted or received under identifiers, passwords and security codes of Authorized Traders, and for the trading and other consequences thereof.
- (c) <u>User Information</u>. User hereby grants to NYSE Arca a perpetual, non-exclusive, world-wide, irrevocable, royalty-free, fully-paid-up license to use, reproduce, display, compile and modify the information and data supplied by User to NYSE Arca, including without limitation, information or data of or related to User's customers and agents. User represents and warrants that, with respect to such information and data (i) User owns or has sufficient rights in and to such information and data to authorize NYSE Arca to perform all of its obligations under this User Agreement with respect thereto and that may be required for User's or NYSE Arca's use of such information, (ii) use or delivery of such information by User or NYSE Arca will not violate the proprietary rights (including, without limitation, any privacy rights) of any party, and (iii) use or delivery of the information by User will not violate any applicable law or regulation.

Notwithstanding the foregoing, unless otherwise required by law, regulation, or governmental authority, or as otherwise agreed to by User, NYSE Arca shall not make information and data supplied by User available outside of the NYSE Euronext group of companies (other than to their directors or professional advisors pursuant to a non-disclosure agreement) in a manner that would reasonably be expected to directly or indirectly identify User as the source of such information or data.

- (d) <u>Fees</u>. User will pay when due all amounts payable to third parties arising from User's access to NYSE Arca. Such amounts include, but are not limited to, applicable exchange and regulatory fees.
- (e) <u>Sponsored Participants</u>. Notwithstanding NYSE Arca's execution and delivery to User of a copy of this Agreement, if User is a Sponsored Participant, and not an ETP Holder, as a condition to initiating and continuing access to NYSE Arca, (i) User must enter into and maintain customer agreements with one or more Sponsoring ETP Holders establishing proper relationship(s) and account(s) through which User may trade on NYSE Arca. Such customer agreement(s) must incorporate the Sponsorship Provisions set forth in NYSE Arca Equities Rules.
- (f) Order Designation. All orders other than orders entered into NYSE Arca by a Sponsored Participant, and any trades resulting there from shall be the responsibility of the ETP Holder from which they originated.

2. NYSE Arca RULES.

(a) Compliance with NYSE Arca Equities Rules. User represents and warrants that: (i) it will use NYSE Arca only if and when it is duly authorized to use NYSE Arca pursuant to NYSE Arca Equities Rules and User is an ETP Holder or User is a Sponsored Participant; (ii) it will only use NYSE Arca in compliance with NYSE Arca Equities Rules; and, (iii) it is and will remain responsible for its use of NYSE Arca and the use of NYSE Arca by any of its employees, customers, and agents or by any Sponsored Participants whose use of NYSE Arca is sponsored by the User; (iv) it will maintain and keep current a list of all Authorized Traders who may obtain access to NYSE Arca on behalf of the User and/or the User's Sponsored Participant(s); and (v) it will familiarize all Authorized Traders with all of User's obligations under this Agreement and will assure that they receive appropriate training prior to any use or access to NYSE Arca.

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- (b) <u>Monitoring</u>. User acknowledges and agrees that NYSE Arca Equities will monitor the use of NYSE Arca by User for compliance with all applicable laws and regulations, including, without limitation, NYSE Arca Equities Rules. User acknowledges its responsibility to monitor its employees, agents and customers for compliance with NYSE Arca Equities Rules, the rules and regulations of any self-regulatory organizations of which User is a member and all applicable federal and state laws.
- (c) Integrity of NYSE Arca. User will not (i) materially alter the information or data supplied to or received from NYSE Arca in violation of NYSE Arca Equities Rules, (ii) materially affect the integrity of the information or data supplied to or received from NYSE Arca, or (iii) supply or render information or data to or from NYSE Arca that is illegal, inaccurate, unfair, uninformative, fictitious, misleading or discriminatory. User will not permit its employees, agents or customers to interfere with or adversely affect NYSE Arca or any use thereof by any other authorized individuals or entities.
- (d) <u>Indemnity</u>. User agrees to indemnify, defend and hold NYSE Arca, NYSE Arca, Inc. and NYSE Arca Equities harmless from and against any and all claims, demands, losses, costs, expenses, obligations, liabilities, damages, recoveries, and deficiencies, including interest, penalties, and attorneys' fees, arising from or as a result of User's breach of its obligations under this User Agreement or otherwise from its use of NYSE Arca.

3. CHANGE OF NYSE Arca, LLC.

User acknowledges and agrees that nothing in this User Agreement constitutes an understanding by NYSE Arca to continue any aspect in its current form. NYSE Arca may from time to time make additions, deletions or modifications to NYSE Arca. User acknowledges and agrees that NYSE Arca may temporarily or permanently, unilaterally condition, modify or terminate the right of any individuals or entities to access, receive or use NYSE Arca in accordance with NYSE Arca Equities Rules. Further, NYSE Arca may temporarily or permanently terminate the right of any individuals or entities to access NYSE Arca at any time if so instructed by NYSE Arca Equities.

4. OWNERSHIP.

User acknowledges and agrees that all patents, copyrights, trade secrets, trademarks and other property rights in or related to NYSE Arca and the information and data made available through NYSE Arca (including compilation rights in information and data) are and will remain the exclusive property of NYSE Arca or its licensors. User will attribute the source as appropriate under all circumstances.

5. INFORMATION.

- (a) Confidentiality. Both parties acknowledge that (i) NYSE Arca and the information and data made available therein, incorporate confidential and proprietary information developed, acquired by or licensed to NYSE Arca, including confidential information of NYSE Arca Equities or other entities, and (ii) each party may receive or have access to other proprietary or confidential information disclosed and marked as confidential by the disclosing party (collectively, the "Information"). The receiving party will use the disclosing party's Information solely to perform its obligations under this User Agreement. The receiving party will take all precautions necessary to safeguard the confidentiality of the disclosing party's Information, including without limitation, (i) those taken by the receiving party to protect its own confidential information and (ii) those which the disclosing party may reasonably request from time to time.
- (b) <u>Disclosure</u>. The receiving party will not disclose, in whole or in part, the disclosing party's Information to any person, except as specifically authorized under this User Agreement. User may not disclose any data or compilations of data made available to User by NYSE Arca without the express, prior written authorization of NYSE Arca. User acknowledges that any and all information provided to NYSE Arca by the User will be disclosed to NYSE Arca Equities for use in accordance with NYSE Arca Equities Rules. User hereby consents to such disclosure. NYSE Arca may also disclose Information in accordance with its regulatory obligations.
- (c) <u>Unauthorized Use or Disclosure</u>. The parties acknowledge that any unauthorized use or disclosure of the disclosing party's Information may cause irreparable damage to the disclosing party. If an unauthorized use or disclosure occurs, the receiving party will immediately notify the disclosing party and take at its expense all steps necessary to recover the disclosing party's Information and to prevent its subsequent unauthorized use or dissemination, including availing itself of actions for seizure and injunctive relief. If the receiving party fails to take these steps in a timely and adequate manner, the disclosing party may take them at the receiving party's expense, and the receiving party will provide the disclosing party with its reasonable cooperation in such actions that the disclosing party may request.
- (d) <u>Limitation</u>. The receiving party will have no confidentiality obligation with respect to any portion of the disclosing party's Information that (i) the receiving party independently developed before receiving the Information from the disclosing party, (ii) the receiving party lawfully obtained from a third party under no obligation of confidentiality, (iii) is or becomes available to the public other than as a result of an act or omission of the receiving party or any of its employees or (iv) the receiving party is compelled to disclose pursuant to legal process provided by a court of competent jurisdiction or other governmental entity or regulatory or self-regulatory authority to whose jurisdiction the receiving party is subject.

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6. DISCLAIMER OF WARRANTY.

NYSE Arca IS MADE AVAILABLE "AS IS" AND WITHOUT WARRANTY OF ANY KIND. ALL WARRANTIES, CONDITIONS, REPRESENTATIONS, INDEMNITIES AND GUARANTEES WITH RESPECT TO THE NYSE Arca AND ANY DATA, SOFTWARE OR INFORMATION MADE AVAILABLE THEREIN BY NYSE Arca, NYSE Arca EQUITIESOR ITS OR THEIR LICENSORS, WHETHER EXPRESS, IMPLIED, OR STATUTORY, ARISING BY LAW, CUSTOM, PRIOR ORAL OR WRITTEN STATEMENTS BY NYSE Arca, NYSE Arca EQUITIES OR ITS OR THEIR AGENTS, AFFILIATES, LICENSORS OR OTHERWISE (INCLUDING, BUT NOT LIMITED TO ANY WARRANTY OF SATISFACTORY QUALITY, ACCURACY, UNINTERRUPTED USE, TIMELINESS, TRUTHFULNESS, SEQUENCE, COMPLETENESS, MERCHANTABILITY, FITNESS FOR PARTICULAR PURPOSE OR NON-INFRINGEMENT AND ANY IMPLIED WARRANTIES ARISING FROM TRADE USAGE, COURSE OF DEALING OR COURSE OF PERFORMANCE) ARE HEREBY OVERRIDDEN, EXCLUDED AND DISCLAIMED.

7. NO LIABILITY FOR TRADES.

USER UNDERSTANDS AND AGREES THAT (I) NYSE Arca IS NOT DIRECTLY OR INDIRECTLY A PARTY TO OR A PARTICIPANT IN ANY TRADE OR TRANSACTION ENTERED INTO OR OTHERWISE CONDUCTED THROUGH NYSE Arca, AND (II) NYSE Arca IS NOT LIABLE IN ANY MANNER TO ANY PERSON (INCLUDING WITHOUT LIMITATION THE USER AND ANY PERSON FOR WHOM THE USER IS AUTHORIZED TO TRADE OR ACT) FOR THE FAILURE OF ANY PERSON ENTERING INTO A TRADE OR TRANSACT BY MEANS OF NYSE Arca TO PERFORM SUCH PERSON'S SETTLEMENT OR OTHER OBLIGATIONS UNDER SUCH TRADE OR TRANSACTION. NEITHER NYSE Arca, NYSE Arca EQUITIES, OR ITS OR THEIR AGENTS, AFFILIATES OR LICENSORS WILL BE LIABLE FOR ANY LOSSES, DAMAGES, OR OTHER CLAIMS, ARISING OUT OF NYSE Arca OR ITS USE. ANY LOSSES, DAMAGES, OR OTHER CLAIMS, RELATED TO A FAILURE OF NYSE Arca TO DELIVER, DISPLAY, TRANSMIT, EXECUTE, COMPARE, SUBMIT FOR CLEARANCE AND SETTLEMENT, OR OTHERWISE PROCESS AN ORDER, MESSAGE, OR OTHER DATA ENTERED INTO, OR CREATED BY, NYSE Arca WILL BE ABSORBED BY THE USER OR THE ETP HOLDER SPONSORING THE USER, THAT ENTERED THE ORDER, MESSAGE OR OTHER DATA INTO NYSE Arca. IF THIS SECTION IS DEEMED TO CONFLICT WITH ANY OTHER SECTION OF THIS USER AGREEMENT, THIS SECTION WILL SUPERCEDE SUCH OTHER SECTION.

8. NO CONSEQUENTIAL DAMAGES.

UNDER NO CIRCUMSTANCES WILL NYSE Arca, NYSE Arca EQUITIES OR ITS OR THEIR AGENTS, AFFILIATES OR LICENSORS BE LIABLE FOR ANY LOSS, DAMAGE, CLAIM OR EXPENSE, INCLUDING WITHOUT LIMITATION ANY DIRECT, CONSEQUENTIAL, INDIRECT, SPECIAL, PUNITIVE OR INCIDENTAL DAMAGES OR LOST PROFITS, WHETHER FORESEEABLE OR UNFORESEEABLE, BASED ON USER'S CLAIMS OR THE CLAIMS OF ITS CUSTOMERS, EMPLOYEES OR AGENTS (INCLUDING, BUT NOT LIMITED TO, CLAIMS FOR LOSS OF DATA, GOODWILL, USE OF MONEY OR USE OF NYSE Arca, INTERRUPTION IN USE OR AVAILABILITY NYSE Arca, STOPPAGE OF OTHER WORK OR IMPAIRMENT OF OTHER ASSETS), ARISING OUT OF BREACH OR FAILURE OF EXPRESS OR IMPLIED WARRANTY, BREACH OF CONTRACT, MISREPRESENTATION, NEGLIGENCE, STRICT LIABILITY IN TORT OR OTHERWISE. THIS SECTION WILL NOT APPLY ONLY WHEN AND TO THE EXTENT THAT APPLICABLE LAW SPECIFICALLY REQUIRES LIABILITY, DESPITE THE FOREGOING EXCLUSION AND LIMITATION.

9. TERM AND TERMINATION.

This User Agreement will be effective as of the Effective Date and will remain in effect thereafter until terminated by either party upon notice to the other party. Termination will be effective at the close of trading in the affected markets and applications on the day that notice of termination is received by the other party hereto. NYSE Arca may terminate this User Agreement immediately if (i) the User is in breach of this User Agreement for any reason, (ii) any representations made by the User in connection with this User Agreement are or become false or misleading or (iii) NYSE Arca is notified that User is no longer an ETP Holder or Sponsored Participant in good standing with NYSE Arca Equities or otherwise is no longer authorized to access NYSE Arca. Upon the termination of this User Agreement for any reason, all rights granted to User hereunder will cease. The provisions of Sections 2(d), 5, 6, 7, 8, 9, and 12 will survive the termination or expiration of this User Agreement for any reason. In no event will termination of this User Agreement relieve User of any obligations incurred through its use of NYSE Arca.

10. ASSIGNMENT.

User shall not assign, delegate or otherwise transfer this User Agreement or any of its rights or obligations hereunder without NYSE Arca's prior approval, which will not be unreasonably withheld. NYSE Arca may assign or transfer this User Agreement or any of its rights or obligations hereunder to a related or unrelated party upon notice to User.

11. FORCE MAJEURE.

Notwithstanding any other term or condition of this User Agreement to the contrary, neither NYSE Arca nor User will be obligated to perform or observe their obligations undertaken in this User Agreement if prevented or hindered from doing so by any circumstances found to be beyond their control.

12. MISCELLANEOUS.

All notices or approvals required or permitted under this User Agreement must be given in writing to the address specified above. Any waiver or modification of this User Agreement will not be effective unless executed in writing and signed by the other party. This User Agreement will bind each party's successors-in-interest. This User Agreement will be governed by and interpreted in accordance with the internal laws of the State of New York, USA. All disputes, claims or controversies between the parties hereto will be submitted to arbitration in New York, New York pursuant to the applicable NYSE Arca Equities Rules, if permissible under such rules, and otherwise under the rules of the American Arbitration Association; provided, however, that nothing herein will prevent NYSE Arca from seeking interim injunctive relief in any court of competent jurisdiction. Both parties submit to the non-exclusive jurisdiction of the state and federal courts in and for New York, New York, USA for the resolution of any dispute arising under this User Agreement. If any provision of this User Agreement is held to be unenforceable, in whole or in part, such holding will not affect the validity of the other provisions of this User Agreement. No action arising out of any claimed breach of this User Agreement may be brought by either party more than one (1) year after the cause of action arose. This User Agreement, together with the applicable NYSE Arca Equities Rules, constitutes the complete and entire statement of all conditions and representations of the agreement between NYSE Arca and User with respect to its subject matter and supersedes all prior writings or understandings.

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SECTION 9 - ARCHIPELAGO SECURITIES™ ROUTING AGREEMENT

Provided that User is an ETP Holder or Sponsored Participant of NYSE Arca Equities and subject to a valid, ongoing User Agreement with NYSE Arca, LLC; Archipelago Securities, LLC (hereinafter "Archipelago Securities"), a broker-dealer registered in accordance with Section 15(a) of the Securities Exchange Act of 1934, agrees to act as agent to User for the purpose of providing certain routing services, as described herein, provided that User is bound by the terms and conditions of this Routing Agreement and any applicable rules and interpretations of NYSE Arca Equities Rules. Whereas Archipelago Securities provides certain order routing services for NYSE Arca Equities, and User desires to use the order routing facilities of NYSE Arca Equities and NYSE Arca, for good and valuable consideration, User and Archipelago Securities agree as follows:

1. ROUTING SERVICES.

Archipelago Securities, a wholly owned subsidiary of Archipelago Holdings, Inc., agrees to act as agent of the User for routing orders entered into NYSE Arca to the applicable market centers or broker-dealers for execution, whenever such routing is required in accordance with NYSE Arca Equities Rules. User understands and agrees that orders executed on its behalf shall at all times be subject to the terms and conditions of NYSE Arca Equities Rules.

2. ORDERS NOT ELIGIBLE FOR ROUTING SERVICES.

User agrees that Archipelago Securities will not execute any orders that are not eligible for order routing in accordance with NYSE Arca Equities Rules. For example, NYSE Arca Equities Rules may provide that if a User has indicated that an order must not be routed to another market center for execution (i.e., by designating an order as a fill-or-return or fill-or-return plus order), the order will not be eligible for routing services provided by Archipelago Securities.

3. CANCELLATION; MODIFICATION OF ORDERS.

User agrees that any requests regarding cancellation or modification of orders shall be subject to NYSE Arca Equities Rules. User understands that such rules may provide that requests to cancel orders while the order is routed away to another market center and remains outside NYSE Arca will be processed by Archipelago Securities, subject to the applicable trading rules of the relevant market center.

4. TRANSMISSION OF ORDER INSTRUCTIONS.

User agrees that all orders on its behalf must be transmitted to Archipelago Securities through NYSE Arca. User agrees that NYSE Arca is its exclusive mechanism for purposes of transmitting orders on its behalf to Archipelago Securities and for receiving notice regarding such orders. Archipelago Securities shall be entitled to rely upon and act in accordance with any order instructions received from NYSE Arca on behalf of User. User agrees that all order executions effected on behalf of User pursuant to this agreement shall be reported by Archipelago Securities to NYSE Arca. The User shall be notified of such executions through NYSE Arca.

5. CLEARANCE AND SETTLEMENT.

User agrees that all transactions executed on its behalf shall be processed in accordance with NYSE Arca Equities Rules. If User is an ETP Holder, User agrees that orders executed or its behalf by Archipelago Securities shall be automatically processed by NYSE Arca for clearance and settlement on a locked-in basis. If User is a Sponsored Participant, User agrees that all orders executed on its behalf by Archipelago Securities shall be cleared and settled, using the relevant Sponsoring ETP Holder's mnemonic (or its clearing firm's mnemonic as applicable).

6. TERM OF AGREEMENT.

This Routing Agreement will be effective as of the Effective Date and will remain in effect thereafter until terminated by either party upon notice to the other party. Termination will be effective at the close of trading in the affected markets and applications on the day that notice of termination is received by the other party hereto. Archipelago Securities may terminate this Routing Agreement immediately if (i) the User is in breach of this Routing Agreement for any reason, (ii) any representations made by the User in connection with this Agreement or the User Agreement are or become false or misleading or (iii) User is no longer a ETP Holder or Sponsored Participant of NYSE Arca Equities or otherwise authorized to access NYSE Arca. Upon the termination of this Agreement or the User Agreement for any reason, all rights granted to User hereunder will cease. The provisions of Paragraphs 7, 8, 9 and 10 will survive the termination or expiration of this Routing Agreement for any reason. In no event will termination of this Routing Agreement relieve User of any obligations incurred through its use of NYSE Arca.

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SECTION 9 - ARCHIPELAGO SECURITIES™ ROUTING AGREEMENT (CONTINUED)

7. INDEMNITY.

User agrees to indemnify, defend and hold Archipelago Securities harmless from and against any and all claims, demands, losses, costs, expenses, obligations, liabilities, damages, recoveries, and deficiencies, including interest, penalties, and attorneys' fees, arising from or as a result of User's breach of its obligations under this Agreement or otherwise from its use of the Archipelago Securities routing services.

8. DISCLAIMER OF WARRANTY.

ROUTING SERVICES ARE PROVIDED "AS IS" AND WITHOUT WARRANTY OF ANY KIND. ALL WARRANTIES, CONDITIONS, REPRESENTATIONS, INDEMNITIES AND GUARANTEES WITH RESPECT TO THE ROUTING SERVICE, WHETHER EXPRESS, IMPLIED, OR STATUTORY, ARISING BY LAW, CUSTOM, PRIOR ORAL OR WRITTEN STATEMENTS BY ARCHIPELAGO SECURITIES, NYSE Arca EQUITIES OR ITS OR THEIR AGENTS, AFFILIATES, LICENSORS OR OTHERWISE (INCLUDING, BUT NOT LIMITED TO ANY WARRANTY OF SATISFACTORY QUALITY, ACCURACY, UNINTERRUPTED USE, TIMELINESS, TRUTHFULNESS, SEQUENCE, COMPLETENESS, MERCHANTABILITY, FITNESS FOR PARTICULAR PURPOSE OR NON-INFRINGEMENT AND ANY IMPLIED WARRANTIES ARISING FROM TRADE USAGE, COURSE OF DEALING OR COURSE OF PERFORMANCE) ARE HEREBY OVERRIDDEN, EXCLUDED AND DISCLAIMED.

9. NO LIABILITY FOR TRADES.

USER UNDERSTANDS AND AGREES THAT (I) ARCHIPELAGO SECURITIES IS NOT LIABLE IN ANY MANNER TO ANY PERSON (INCLUDING WITHOUT LIMITATION THE USER AND ANY PERSON FOR WHOM THE USER IS AUTHORIZED TO TRADE OR ACT) FOR THE FAILURE OF ANY PERSON ENTERING INTO A TRADE OR TRANSACTION BY MEANS OF NYSE Area TO PERFORM SUCH PERSON'S SETTLEMENT OR OTHER OBLIGATIONS UNDER SUCH TRADE OR TRANSACTION. NEITHER ARCHIPELAGO SECURITIES, OR ITS AGENTS, AFFILIATES OR LICENSORS WILL BE LIABLE FOR ANY LOSSES, DAMAGES, OR OTHER CLAIMS, ARISING OUT OF THE ROUTING SERVICE OR ITS USE. ANY LOSSES, DAMAGES, OR OTHER CLAIMS, RELATED TO A FAILURE OF ARCHIPELAGO SECURITIES TO DELIVER, DISPLAY, TRANSMIT, EXECUTE, COMPARE, SUBMIT FOR CLEARANCE AND SETTLEMENT, OR OTHERWISE PROCESS AN ORDER, MESSAGE, OR OTHER DATA ENTERED INTO, OR CREATED BY, NYSE Area WILL BE ABSORBED BY THE USER OR THE ETP HOLDER SPONSORING THE USER, THAT ENTERED THE ORDER, MESSAGE OR OTHER DATA INTO NYSE Area. IF THIS SECTION IS DEEMED TO CONFLICT WITH ANY OTHER SECTION OF THIS USER AGREEMENT, THIS SECTION WILL SUPERCEDE SUCH OTHER SECTION.

10. NO CONSEQUENTIAL DAMAGES. UNDER NO CIRCUMSTANCES WILL ARCHIPELAGO SECURITIES, NYSE Arca EQUITIES OR ITS OR THEIR AGENTS, AFFILIATES OR LICENSORS BE LIABLE FOR ANY LOSS, DAMAGE, CLAIM OR EXPENSE, INCLUDING WITHOUT LIMITATION ANY DIRECT, CONSEQUENTIAL, INDIRECT, SPECIAL, PUNITIVE OR INCIDENTAL DAMAGES OR LOST PROFITS, WHETHER FORESEEABLE OR UNFORESEEABLE, BASED ON USER'S CLAIMS OR THE CLAIMS OF ITS CUSTOMERS, EMPLOYEES OR AGENTS (INCLUDING, BUT NOT LIMITED TO, CLAIMS FOR LOSS OF DATA, GOODWILL, USE OF MONEY OR USE OF ROUTING SERVICES, INTERRUPTION IN USE OR AVAILABILITY OF ARCHIPELAGO SECURITIES, STOPPAGE OF OTHER WORK OR IMPAIRMENT OF OTHER ASSETS), ARISING OUT OF BREACH OR FAILURE OF EXPRESS OR IMPLIED WARRANTY, BREACH OF CONTRACT, MISREPRESENTATION, NEGLIGENCE, STRICT LIABILITY IN TORT OR OTHERWISE. THIS SECTION WILL NOT APPLY ONLY WHEN AND TO THE EXTENT THAT APPLICABLE LAW SPECIFICALLY REQUIRES LIABILITY, DESPITE THE FOREGOING EXCLUSION AND LIMITATION.

11. ASSIGNMENT.

User shall not assign, delegate or otherwise transfer this Routing Agreement or any of its rights or obligations hereunder without Archipelago Securities' prior approval, which will not be unreasonably withheld. Archipelago Securities may assign or transfer this Routing Agreement or any of its rights or obligations hereunder to a related or unrelated party upon notice to User.

12. FORCE MAJEURE.

Notwithstanding any other term or condition of this Routing Agreement to the contrary, neither Archipelago Securities nor User will be obligated to perform or observe their obligations undertaken in this Routing Agreement if prevented or hindered from doing so by any circumstances found to be beyond their control.

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Į	SECTION 9 - ARCHIPELA	AGO SECURITIES ROUTING AGREEMENT (CONTINUED)
	Any waiver or modification of provided that this agreemen applicable. This Routing Agre interpreted in accordance wit parties hereto will be submitt Arca Equities Rules, constitut	ired or permitted under this Routing Agreement must be given in writing to the address specified above. If this Routing Agreement will not be effective unless executed in writing and signed by the other party, at shall at all times be interpreted to effect the rules and interpretations of NYSE Arca Equities, as element will bind each party's successors-in-interest. This Routing Agreement will be governed by and the internal laws of the State of New York, USA. All disputes, claims or controversies between the sed to arbitration in New York, New York. This Routing Agreement, together with the applicable NYSE tes the complete and entire statement of all conditions and representations of the agreement between ser with respect to its subject matter and supersedes all prior writings or understandings.
	Execution of this Agreeme alternatively, by signing in t	ent by an ETP Holder may be effected by initialing the User Agreement for NYSE Arca or, the space provided below:
	Accepted on behalf of ETP Ho	older:
	Ву:	
	Name:	
	Title:	
	Date:	

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SECTION 10 – INDIVIDUAL REGISTRATION Provide the information requested below for each of the requested individuals associated with the Applicant Broker-Dealer. Pursuant to NYSE Arca Equities Rule 6.18, all applicants must designate a Series 24 licensed principal. Applicants subject to Exchange Act Rule 15c3-1 are required to have a designated Series 27 licensed principal, pursuant to NYSE Arca Equities Rules 4.5 Additionally, Authorized Traders for whom NYSE Arca will be the DEA are required to have successfully passed the Series 7 examination, pursuant to NYSE Arca Equities Rule 2.4. Proof of examination requirements, fingerprint card submission, and Form U-4s should be submitted by the Applicant to Web CRD® for review by NYSE Arca. For individuals required to be disclosed below who do not have required information available on Web CRD®, the Applicant may be required to submit an investigation fee of \$125 per individual DESIGNATED SERIES 24 LICENSED PRINCIPAL Name: CRD: CRD: CRD:

______ Fax: _____ Email: **DESIGNATED SERIES 27 LICENSED PRINCIPAL** Name: Fax: Phone: Email: **AUTHORIZED TRADER** _____ CRD: Name: Phone: Email: **AUTHORIZED TRADER** _____ CRD: Name: Fax: Phone: Email: **AUTHORIZED TRADER** _____ CRD: Name: Phone: Email: **AUTHORIZED TRADER** CRD: _____ Name: _____ Fax: Phone: Email:

Additional Authorized Traders are submitted in a separate document attached hereto

SECTION 10 (CONTINUED) - KEY PERSONNEL Please identify the key personnel who hold the below positions (or the individual whose responsibilities are the functional equivalent of such position, regardless of actual titles used by the Applicant Firm) and who will want to receive communications pertaining to our equities markets. Chief Executive Officer ("CEO") _____ CRD: Name: Fax: Phone: Email: Chief Financial Officer ("CFO") _____ CRD: Name: Phone: _____ Fax: ___ Email: Chief Compliance Officer ("CCO") ____ CRD: Name: _____ Fax: _____ Phone: Email: Chief Operations Officer ("COO") ______ CRD: Name: Phone: Fax: Email: **Head of Clearing** Name: CRD: Phone: _____ Fax: _____ Email: **Head of Connectivity** ______ CRD: Name: ______ Fax: __ Phone: Email: **Head of Trading** Name: _ CRD: ____ _____ Fax: Phone: Email:

NYSE Arca Equities, Inc.

DEA Application Requirements

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SECTION 11- DESIGNATED EXAMINING AUTHORITY (DEA) REQUIRE	EMENTS
ITSFEA COMPLIANCE ACKNOWLEDGEMENT	
This form should be completed by a Director, Officer, General Partner or Individual Dealer's ITSFEA Compliance Procedures are followed. In the future, this continues are along with the Broker-Dealer's year-end FOCUS Report (Form X-17).	ertification must be completed and filed with
Broker-Dealer:	
SEC#	
The undersigned states and certifies as follows:	
It is understood that should any Director, Officer, General Partner or Associated 1.1(f)) of the Broker-Dealer acquire material, non-public information concerning a comay be a violation of NYSE Arca Equities Rules and Federal securities laws to misu by the corporation, or any options or other derivative securities based thereon, while It is further understood that should any Director, Officer, General Partner or Association-public information concerning the market in a security or group of securities, it and Federal securities laws to make improper use of such information in connection any option or other derivative based thereon. It is also understood that it may be a violation of NYSE Arca Equities Rules and person or entity any non-public, material corporate or market information that may be group of securities. Additionally, the Broker-Dealer represents that it has established written procedimaterial non-public information by the Broker-Dealer or by any of the Broker-Dealer's busin The Individual(s) responsible for overseeing and supervising the specific element Compliance procedures has reviewed (or supervised the review of) the Broker-Deale brokerage securities accounts of Directors, Officers, General Partners, and Associate with the specific provisions (including timing and type of review) detailed in and reprocedures. Based upon the assessment of the adequacy of those procedures and of the autithose procedures (except as to any securities transactions involving the possible mis been reported to NYSE Arca), there is no reasonable cause to believe that any Persons of the Broker-Dealer has misused, made improper use of, or disclosed main violation of NYSE Arca Equities Rule 6.3	orporation whose securities are publicly traded, it as such information or trade any securities issued such information remains non-public. ated Person of the Broker-Dealer obtain material, may be a violation of NYSE Arca Equities Rules with trading in the security, group of securities or Federal securities laws to disclose to any other the acquired regarding a publicly traded security or seasonably designed to prevent misuse of dealer's Directors, Officers, General Partners or ness. In the of the member firm or organization's ITSFEA er's proprietary, error account(s), and any outside ed Persons with the Broker-Dealer, in accordance equired by the firm's written ITSFEA compliance thority and diligence of the person(s) carrying out suse of non-public information which already have Director, Officer, General Partner, or Associated
Accepted on behalf of ETP Holder:	
Signature of Authorized Officer, Partner, Managing Member, or Sole Proprietor	Date
Print Name of Authorized Officer, Partner, Managing Member, or Sole Proprietor	Title

OTP HOLDER REQUEST FOR OFF-FLOOR TRANSFER OF POSITIONS

OTP Holder	CRD#
positions from one trading account to	(d), the OTP Holder identified above intends to transfer certain securities to another account in a manner other than trading on the floor of a national er hereby requests the NYSE Arca approval to transfer securities positions off ecount to another as follows:
Proposed Transfer Date:	
Briefly explain the purpose of this Position Transfer:	
Option or Stock Symbols of the positions to be transferred:	
The accounts and OTP Holders own	ning and controlling the accounts involved in this position transfer include:
Positions will be transferred From Account #	
Owned/Controlled by: (Name of OTP Holder)	
Positions will be transferred To Account #	
Owned/Controlled by: (Name of OTP Holder)	
The net effect on open interest as a	a result of this transfer in securities positions will be:
☐ No effect on open interest	Approximately % effect on open interest
If all ownership and control of the tregistered OTP Holder or OTP Firm,	transferred positions will be relinquished to a person or entity that is <u>not</u> a , this form may not be used.
The undersigned hereby represents	that the information contained herein is true, correct and complete.
Print Name of Authorized Person	Title
Signature	Date
Submit scan and return this form	to: - Client Relationship services at crs@nyse.com
Approved by:	on
1	

NYSE Arca Options - Designated Give-up Notification Form

OTP Firm Name						CRD#			
Business Contact Name							<u> </u>		
Business Contact Phone and E-mail Address									
!. Give-up Informati	on								
The above reference ups for the following (<u>NOTE</u> : Please chece enabled or disabled)	Clearin k the a	g Members						Enable Give Up	Disable Give Up
Clearing Member Name:				oc	C #:				
Clearing Member Name:				ОС	C #:				
Clearing Member Name:				oc	C #:				
Clearing Member Name:				oc	C #:				
Clearing Member Name:				oc	C #:				
Clearing Member Name:				oc	C #:				
Clearing Member Name:				ОС	C #:				
Clearing Member Name:				OC	C #:				
OTP Holder represer ransactions executed OTP Holder represer	d pursu	ant to this agree	ement and N	VYSE Arca Ru	ıle 6.1	5.		_	
Print Name and Title Authorized Signator		į							
Signature					Dat	te			

Please return to Client Relationship Services via email CRS@nyse.com.

NYSE Arca Options

TERMINATION OF FLOOR BROKER

To:	NYSE Arca Client Relationship Services Dep	partment
From:	OTP Member Firm	
Re:		
	Floor Broker Name	Acronym(s)
Date of termination:		(Close of Business)
☐ Temp	porary Termination (1-120 days)	
	- Date of Return:	· · · · · · · · · · · · · · · · · · ·
□ Perm	anent Termination	
	Authorized Signature of OTP Firm	Date

Checklist for Terminating an OTP Floor Broker

- OTP holders must notify the Exchange no later than one (1) business day in advance of the proposed termination date.
- Temporary terminations cannot exceed 180 days.
- 3. OTP holders must return Floor Badge and Handheld to Arca Floor Staff
- 4. In conjunction with a permanent termination, a Form U-5 for the "FB" registration category should be submitted on WebCRD within ten (10) business days of termination.
- 5. Individuals who are registered and wish to remain registered in the NYSE Arca Interim

 Member Floor Broker Program should not submit this form or the Form U-5. *For more

 information about the NYSE Arca Interim Member Floor Broker Program, please contact

 Client Relationship Services via email at crs@nyse.com.