PERSHING ADVISOR SOLUTIONS LLC

ACCOUNT APPLICATION AND AGREEMENT

Welcome to Pershing Advisor Solutions. To open and fund your new investment account(s), please provide all the information requested. Be sure to initial any corrections, cross-outs and white-outs. Any corrections to the Tax ID or SSN will require the submission of a new W9.

STEP I. ACCOUNT DETAILS		
Account Title (name of this account)		Account Number
Client Name		
Account Description (will appear on statements. Maximum 36 characters.):	Short Name (Advisor use only)	Investment Professional Number

TYPE OF ACCOUNT	ADDITIONAL REQUIRED PAPERWORK
Individual	
Individual Transfer on Death	Individual Transfer on Death Agreement
Joint Tenant	See Joint Accounts section
Joint Transfer on Death	Joint Transfer on Death Account Agreement, see Joint Accounts section
Custodial: UGMA (only available in SC, VT, Virgin Islands, and Guam)	See Custodial Accounts section
Trust: Revocable Irrevocable Additional Distinction: Testamentary Family Charitable Living Statutory	Trustee Certification of Investment Powers, Beneficial Owner Information Form ^{**} (required only for Statutory/Business Trusts/Foreign Trusts)
Sole Proprietor	Certificate of Sole Proprietorship
Corporation: C Corp S Corp Foreign Corp	Entity Certification of Powers, Articles of Incorporation, Beneficial Owner Information Form ^{**} , and other documentation that may be required. Ensure the exempt payee code is entered in W9 Certification section for C Corp tax classification.
LLC: C Corp S Corp Partnership Disregarded Entity (Name of Regarded/Owner*)	See New Accounts Requirement document. Ensure the exempt payee code is entered in W9 Certification section for C Corp tax classification.
Individual Single Member LLC (Name of Regarded/Owner*)	See New Accounts Requirement document
Non-Profit Organization	Formation documents/charter, Entity Certification of Powers, proof of 501(c)(3) status, and other entity documents that may be required Beneficial Owner Information Form ^{**} . Ensure the exempt payee code is entered in W9 Certification section.
Partnership: General Limited	Partnership Certification of Powers, Certificate of Limited Partnership, Beneficial Owner Information Form**
Estate: Person/entity appointed to act on behalf of the account: Administrator Personal Representative Executor/Executrix Number appointed to act on account	Certified Copy of Death Certificate, Notarized Affidavit of Domicile, Letters of Testamentary or Court Appointment (dated within 60 days), other documents may be required

TYPE OF ACCOUNT	ADDITIONAL REQUIRED PAPERWORK
529 Plan Account	529 Plan Account Application
Pershing LLC IRA (Inherited, Traditional, Rollover, Roth, SEP, SIMPLE)	Adoption Agreement and Plan Documents, see New Accounts Requirement document
Other Pershing LLC Retirement Accounts (Profit Sharing Plan, Money Purchase Plan, 403[b][7], 401[k], Individual [K])	See New Accounts Requirement document
Non Pershing Retirement Account: Covered by ERISA? Yes No	Trustee Certification of Investment Powers, Beneficial Owner Information Form** (required if non-ERISA retirement plan)
Other	See New Accounts Requirement document

* If the owner is a non-U.S. person, the appropriate IRS form W-8 must be provided by the non-U.S. owner.

**Required unless legal entity is excluded from the Customer Due Diligence Rule. If an exclusion applies, please complete the Beneficial Owner Information Exclusions Form.

For Joint Accounts Only

Are the account holders married to each other?	Number of Tenants	Tenancy State
Yes No		
Tenancy Clause		
Community Property Community Property	erty with Rights of Survivorship	Common
Tenants by Entirety Joint Tenants wit	h Rights of Survivorship Usufruct (I	A Residents only)
See the Joint Accounts Section of the Terms an	d Conditions that govern your account for m	are information about joint accounts

See the Joint Accounts Section of the Terms and Conditions that govern your account for more information about joint accounts.

For Custodial Accounts Only

State in Which Gift was Given	Date Gift Was Given		Age Designated to Terr	ninate
Manner in Which Gift was Given	·		-	
Created by gift Trust	Exercise by appointment	Transfer by	fiduciary or obligor	Will

Brokerage Type

Cash		
0		in privileges are granted by Pershing in its sole discretion under its Margin Agreement with you, onditions of this Account Application and Agreement (the " <u>Agreement</u> ").
If Unemployed, Retire	ed, Student, or Hor	nemaker, Indicate Net Worth and Source of Income
FOR ADVISOR USE ONLY:		
Select One: 🗌 Transa	ction-based p	ricing (default) 🗌 Asset-based pricing: Program Name
Enter your DTC identifica	tion # for duplica	te confirms
Account Mnemonic	##	Use PRX##DIR to direct proxies to the address of record.

STEP 2. PRIMARY ACCOUNT HOLDER INFORMATION

To help the government fight the funding of terrorism and money laundering activities, federal laws require that all financial organizations obtain, verify and record information that identifies each person who opens an account. What this means for you: when you open an account, we will ask for your name, address, date of birth and other information that will allow us to identify you. We may also require a copy of your driver's license or other government-issued identifying document. Complete this step for only the primary registration type (Individual or Entity). Include either the Social Security Number or the Employer Identification Number. If completed incorrectly, a new W9 will be required.

Primary account holder may include owner, minor, ward or entity. UGMA/UTMA account: minor is the primary account holder; custodian is the secondary account holder. If disregarded entity, enter information for the regarded/owner. List disregarded entity in the additional account holder section.

Name					
Entity Name (if applicable)		Date of I	Date of Birth		Specified Adult*
Social Security Number/Employer Identification Number (I	EIN)				Person Entity
Email					
Home Phone	Business Phone			Mobile Phone	
Legal Address (no P.O. box)	1			1	
City		State/Province		Zip/Postal Code	
Country					
Mailing Address (if different from legal address)					
City		State/Province		Zip/Postal code	
Country					
Previous Physical Address (if current address less than two	o years old)				
City			State/Province	2	Zip/Postal code
Country					
*Specified Adult: defined by EINPA as (a) a person are 65 a	and above or (b) a person are 19 or a	hours the	t is upphie to p	votoot bic /box c	www.interacto.lf.vou.wich.to.add.a.tructod

*Specified Adult: defined by FINRA as (a) a person age 65 and above; or (b) a person age 18 or above that is unable to protect his/her own interests. If you wish to add a trusted contact, please complete the Trusted Contact section.

Citizenship/Country of Incorporation

Proof of address is required for each Non-U.S. person and or U.S. citizens living abroad. Examples include: driver's license, utility bill dated within six months, or property tax bill.

Please check only one: U.S. U.S. Resident Alien Non-Re	esident Alien (Please provide a valid Government ID and a form W-8)
Primary Citizenship/Country of Incorporation	Additional Citizenship

Employment Status and Industry Affiliations

If Employed/ Self-Employed is indicated, please complete all employment fields.

Employed	Self-Employed	Retired	Unemployed	Homemaker	Student	
Occupation			Years Empl	oyed	Type of Business	
Employer Name						
Employer's Address						
City			State/Provi	nce	Zip/Postal Code	
Country						

If you or an immediate family member is affiliated with a broker-dealer, obtain and attach the compliance officer's letter of approval (as required by FINRA rule 3210).

Check if you are affiliated with a broker-dealer.

If you are affiliated with a broker-dealer that is not your employer, please provide the name of that broker-dealer below. Broker-Dealer Name

 Check if a member of your immediate family is affiliated with a broker dealer.

 Broker-Dealer Name
 Employee Name

 Relationship

Check if you are a member/employee or related to a member/employee of a national securities association (i.e. NYSE or FINRA). If checked, please list the affiliation here.

Check if you, or an immediate family member, are a director, 10% shareholder, policy-making officer or controlling person of a publicly traded company.

If checked, please provide company(ies) and symbol(s)

STEP 3. SECONDARY ACCOUNT HOLDER INFORMATION

Secondary Account Holders include custodians, conservators, guardians, disregarded entities or power of attorneys. UGMA/UTMA account: minor is the Primary Account Holder; custodian is the Secondary Account Holder. Proof of Address is required for each non-U.S. person and U.S. citizens living abroad. Examples include: driver's license, utility bill dated within six months, or property tax bill. Name

Entity Name (if applicable)		Date of Birth		Specified Adult*
Social Security Number/Employer Identification Number (EIN)		Person	Entity	
Email				
Home Phone	Business Phone		Mobile Phone	
Legal Address (no P.O. box)				
City			State/Province	Zip/Postal Code
Country				

Mailing Address (if different from legal address)

City	State/Province	Zip/Postal code
Country		
Previous Physical Address (if current address less than two years old)		
City	State/Province	Zip/Postal code
Country		

*Specified Adult: defined by FINRA as (a) a person age 65 and above; or (b) a person age 18 or above that is unable to protect his/her own interests. If you wish to add a trusted contact, please complete the Trusted Contact section.

Citizenship

Proof of address is required for each Non-U.S. person and or U.S. citizens living abroad. Examples include: driver's license, utility bill dated within six months, or property tax bill.

Please check only one: U.S. U.S. Resident Alien Non-Re	sident Alien (Please provide a valid Government ID and a form W-8)
Primary Citizenship	Additional Citizenship

Employment Status and Industry Affiliations

If employed/ self-employed is indicated, please complete all employment fields.

Employed	Self-Employed	Retired	Unemployed	Homemaker	Student	
Occupation			Years Er	nployed	Type of Business	
Employer Name						
Employer's Address						
City			State/Pr	ovince	Zip/Postal Code	
Country						

If you or an immediate family member is affiliated with a broker-dealer, obtain and attach the compliance officer's letter of approval (as required by FINRA rule 3210).

Check if you are affiliated with a broker-dealer.

lf yo	are affiliated with a broker-dealer that	t is not your employer	, please provide the n	ame of that broker-deal	er below.
Broke	-Dealer Name				

Check if a member of your immediate family is affiliated with a broker dealer.						
Broker-Dealer Name	Employee Name	Relationship				
Check if you are a member/en	nployee or related to a member/employee	of a national securities association (i.e. NYSE or I	FINRA).			
If checked, please list the affiliation here.						
Check if you, or an immediate family member, are a director, 10% shareholder, policy-making officer or controlling person of a publicly						
traded company.	· · · ·					
If checked, please provide company(ies) and	d symbol(s)					

Additional Account Holders

Are there more than two account holders?	'es
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If yes, please complete and attach an Additional Account Holder Supplement form for each account holder.

Pershing Advisor Solutions LLC ("<u>Pershing Advisor Solutions</u>"), member FINRA, SIPC, is a wholly owned subsidiary of The Bank of New York Mellon Corporation ("<u>BNY Mellon</u>"). Clearing, custody or other brokerage services may be provided by Pershing LLC, member FINRA, NYSE, SIPC. Pershing Advisor Solutions relies on its affiliate Pershing LLC to provide execution services. Trademark(s) belong to their respective owners.

No

STEP 4. TRUSTED CONTACT

Trusted Contact: person 18 years of age or older, other than your Advisor, whom Pershing Advisor Solutions may contact about the account. The type of information that may be shared with a trusted contact may be found in Section IV, paragraph A of the Terms and Conditions document that accompanies this Agreement.

Name		Date of Birth
Email		
		1
Home Phone	Business Phone	Mobile Phone
Mailing Address		
City	State/Province	Zip/Postal Code
Country		1

STEP 5. ADDITIONAL ACCOUNT INFORMATION

Special note for non-U.S. accounts: with respect to assets custodied by Pershing on your behalf, you acknowledge that income and capital gains or distributions to you from this account may be taxable in your home jurisdiction. Please consult with your tax advisor in this regard.

Disclosures Required Under the USA PATRIOT ACT

 Is this account for a Foreign Financial Institution (e.g. non-U.S. bank; non-U.S. branch of a U.S. bank; broker-dealer; futures merchant; commodities introducing broker; mutual fund; money transmitter or currency exchanger)? 	Yes No
2) Is this account a private banking account as defined under the USA PATRIOT Act?	Yes No
3) Is this an account for a Foreign Bank as defined under the USA PATRIOT Act?	Yes No
a) If yes, is the bank a Central Bank?	Yes* No
b) If yes, is this a Foreign Bank operating under an Offshore Banking License?	Yes No
c) If yes, is this a Foreign Bank operating under a banking license issued by a Non-Cooperative Country or Territory?	Yes No
 d) If yes, is this a Foreign Bank operating under a banking license issued by a jurisdiction subject to Section 311 measures? 	Yes No
If the answer to questions b, c, or d above is yes, how many people or entities own 10% or more of the Bank (if its shares are not p	publicly traded?)**
**If number is greater than zero, a Foreign Bank Beneficial Ownership form must accompany this request.	
4) Are you, or anyone with an interest in this account, currently or formerly, either (1) a senior military, governmental, or political official, or (2) closely associated with an immediate family member of such an official?	Yes*** No
If yes, identify the name of the official, office held and country	
*If yes, your Investment Advisor must submit additional certification of ownership and disclosure information.	

***If yes, your Investment Advisor must submit an Identification Questionnaire for Politically Exposed Persons with this request.

STEP 6. ACCOUNT FUNDING AND FEATURES

What is the **initial** source of funds for this account? If you are transferring assets from another financial institution, please indicate the origin of those investments.

Accounts Receivable	Accumulated Savings	Alimony	Gift
Income From Earnings	Inheritance	Insurance Proceeds	Investment Proceeds
Legal Settlement	Lottery/Gaming	Pension/IRA/Retirement Sa	vings
Rollover	Rental Income	Sale of Business	Sales of Real Estate
Spouse/Parent	Other		

Cash Balances

Uninvested cash balances in your account will be automatically invested into the sweep product selected by your Investment Advisor. Any debits in your account will also be covered automatically by redemptions, to the extent you have a balance in the sweep product sufficient to cover the debit balance.

For important information about a fund, please read the fund prospectus.

Further information on the sweep program can be found in the Terms and Conditions governing this Agreement.

STEP 7. TAX LOT DISPOSITION METHODS

Please choose your default disposition method for mutual funds, all other securities, and stocks in Pershing's Dividend Reinvestment Plans. If you do not choose a default disposition method, the federally mandated default method—first-in first-out ("<u>FIFO</u>")—will be used.

DISPOSITION METHODS FOR STOCKS IN PERSHING'S

DISPOSITION METHODS FOR MUTUAL FUNDS

DISPOSITION METHODS FOR ALL OTHER SECURITIES

		DIVIDEND REINVESTMENT PLAN
Average Cost (using FIFO)	First In, First Out (FIFO)	Average Cost (using FIFO)
First In, First Out (FIFO)	High Cost	First In, First Out (FIFO)
High Cost	High Cost Long-Term	High Cost
High Cost Long-Term	High Cost Short-Term	High Cost Long-Term
High Cost Short-Term	Last In, First Out (LIFO)	High Cost Short-Term
Last In, First Out (LIFO)	Low Cost	Last In, First Out (LIFO)
Low Cost	Low Cost Long-Term	Low Cost
Low Cost Long-Term	Low Cost Short-Term	Low Cost Long-Term
Low Cost Short-Term	Minimize Short-Term Gains	Low Cost Short-Term Gains
Minimize Short-Term Gains		Minimize Short-Term Gains

Your Investment Advisor may choose to change the default tax lot methodology.

STEP 8. BOND ELECTIONS

If you do not choose bond elections, the noted IRS defaults will be selected.

Election 1 - Bond Premium Amortization (tax free bonds must be amortized)

- ____ Yes/IRS Default: Amortize.
- **No/Alternative:** Do not amortize.

Election 2 - Market Discount Accrual Method

- Ratable/Alternative
- Constant Yield/IRS Default

Election 3 - Include Market Discount as Income

- No/IRS Default: Don't include market discount as income.
- Yes/Alternative: Include market discount in income.

STEP 9. ELECTRONIC DELIVERY OF ACCOUNT COMMUNICATIONS

For your convenience, Account Communications (as defined in the Terms and Conditions that accompany this Agreement) will be delivered to you electronically. You will be notified by e-mail when documents become available for you to retrieve online at our website. The URL for the website will be provided to you via email once your ID has been established. Tax documents will be sent via paper delivery. If you prefer electronic delivery, please access the Investor Portal and update your preference.

To link this account to your existing ID, please provide the ID here

Electronic delivery is subject to the Terms and Conditions that apply to this Agreement. A valid email address must be provided for delivery of notification emails.

For online access, please provide this required information:

Check here if this user is a third party, such as attorney, accountant, or other interested party. This user will have view only capabilities.

Relationship to Third Party

Mothers Maiden Name (last name- required to establish a User ID)	Date of Birth (required to establish a User ID)
Email Address (required to establish a User ID)	

Additional information about Electronic Delivery can be found in section IV, Paragraph H of the Terms and Conditions that accompany this Agreement.

If you are requesting a new User ID, indicate your first and second choices below. User IDs must have a minimum of 7 and maximum of 15 characters.

User ID Desired (first choice)	User ID Desired (second choice)

If you do not request a User ID above, all of your Account Communications will default to paper delivery. In addition, if you establish a User ID, but would prefer to receive certain Account Communications via paper, please change your delivery preferences in the Investor Portal upon receipt of your User ID. Each Account Communication delivered via paper may be subject to a fee.

STEP 10. NAME DISCLOSURE

When a company in which you own shares through your account at Pershing Advisor Solutions asks us for your name, address and the number of shares you own in order to communicate with you, we are obligated by our regulators to provide this information to them unless you object in writing. Please note that some issuers do not allow you to opt out.

Withhold this information from the companies in which you own stock where permitted by law.

STEP 11. PROXIES AND CORPORATE MAILINGS

Proxies and corporate mailings (including corporate action notifications) will be sent to your Investment Advisor.

____ Check here if you would prefer to receive and vote or act on proxies and corporate mailings yourself.

Check here to opt out from receiving general meeting and proxy notifications for non-US securities. We are required to deliver general meeting and proxy notifications for European Economic Area ("<u>EEA</u>") equity securities under the Shareholder Rights Directive II unless you opt out of this service. Certain EEA countries may not allow shareholders to opt-out of receiving general meeting and proxy notifications.

For more details, please review the additional information found in Section IV, Paragraph N of the Terms and Conditions document that accompanies this Agreement.

STEP 12. QUARTERLY CONFIRM ENROLLMENT

___ Check here to enroll in the quarterly confirm report in lieu of individual trade confirmations.

You represent that a fiduciary has investment discretion over this account. By signing below, you acknowledge that you waive your right to receive separate individual trade confirmations and will instead receive the same information delivered on a Quarterly Confirmation Report ("<u>QCR</u>"). You cannot discontinue receipt of trade confirmations altogether; you must receive a trade confirmation report at least quarterly. All information contained in the individual trade confirmations will be consolidated and delivered to you at the end of each calendar quarter within the QCR. The QCR will be delivered via mail or e-delivery based on your previously elected delivery method for the Account Statement. Your Investment Advisor and/or third party investment advisor will continue to have access to individual trade confirmations. You can request individual trade confirmations by submitting a request to your Investment Advisor — additional fees may apply. Your election to receive the QCR in lieu of individual trade confirmations may impact your ability to promptly monitor trading activity made by your Investment Advisor and/or third party Investment Advisor. You assume full responsibility for this election. You may rescind this instruction at any time and for any reason and return to receiving individual trade confirmations by contacting your Investment Advisor or Pershing Advisor Solutions.

The undersigned(s) hereby authorizes Pershing Advisor Solutions to accept this application for all other like accounts opened at Pershing Advisor Solutions after the effective date hereunder, that are eligible for QCR. The undersigned shall promptly notify Pershing Advisor Solutions if such account(s) are not deemed to be discretionary as set forth above. This selection is only available for accounts that are opened with the same registration and authorized signors as listed herein and where the account(s) is managed by an Investment Advisor or other such fiduciary with investment discretion.

STEP 13. PROSPECTUS MAILING INSTRUCTIONS

You can choose to direct the mailing of prospectus documents for transactions in exchange traded funds, unit investment trusts, sweep vehicles, and mutual funds to your Investment Advisor.

By checking the box below, you authorize Pershing Advisor Solutions to direct these mailings to your Investment Advisor. If you have more than one account registration, you must make this choice separately for each. You can always request a paper copy of any prospectus for your account from Pershing Advisor Solutions at no additional charge.

Prospectus documents should be mailed to my Investment Advisor(s).

Note: Prospectuses will only be sent to your Investment Advisor if they have authorized us to redirect these documents to them. Otherwise, prospectuses will be delivered to the mailing address on the account.

Space Left Intentionally Blank

STEP 14. PLEASE READ AND SIGN

Accounts. You request that Pershing Advisor Solutions open a brokerage account(s) in the names listed as account holders on this Agreement. You authorize Pershing Advisor Solutions to open additional brokerage accounts with the same registration using the address of record and other information that you provide in accordance with instructions received from your Investment Advisor(s). You acknowledge that this Agreement (including the Terms and Conditions incorporated by reference into this Agreement as a material part thereof) governs each account opened under this Agreement.

You have received, read and understood this Agreement and your Margin Agreement with Pershing and you agree to be bound by their terms as amended from time to time.

You understand that Pershing Advisor Solutions may send disclosures regarding Your Account(s), and that Pershing Advisor Solutions may modify them by sending updated disclosures. You agree that Pershing Advisor Solutions may provide information regarding this account to the Investment Advisor.

Cost Methodology. Unless otherwise indicated to Pershing Advisor Solutions, you authorize Pershing Advisor Solutions or Pershing to calculate investment gains and losses in Your Account using the FIFO method for all securities.

Margin. If you or your representative has checked the Margin box on your Agreement, then you understand that margin privileges are granted by Pershing in its sole discretion under Pershing's Margin Agreement with you, included with the Terms and Conditions of this Agreement, all of which you have read and understand.

You understand that in a margin account, you may lose more than your initial investment.

Trading Authorization. You acknowledge receipt and understanding of this Agreement's trading authorization terms. You consent to granting trading authorization as defined in Section IV, Paragraph CC of the Terms and Conditions of this Agreement.

Third Party Authorization. You authorize Pershing Advisor Solutions to accept instructions from your Investment Advisor only as authorized in this Agreement and any letters of authorization that you complete, sign and submit.

If your Investment Advisor informs Pershing Advisor Solutions that they have entered into a services agreement with a third party firm to provide technology, administrative, management, investment and/or trading services for Your Account, Pershing Advisor Solutions will comply with instructions provided by your Investment Advisor. By signing this document, you acknowledge that you have received a copy of your Investment Advisor's Form ADV and/or management agreement that defines and discloses the specific services being provided by the third party firm. You authorize Pershing Advisor Solutions to take any steps reasonably required to facilitate the authorizations you have separately given your Investment Advisor and the third party firm. Accordingly, you acknowledge that Pershing Advisor Solutions must transmit Your Account data to the third party firm in order for the specified services to occur, and you authorize Pershing Advisor Solutions to transmit Your Account data to the third party firm for that purpose.

Fees. You understand that your Investment Advisor negotiates your custody fees with Pershing Advisor Solutions, as well as, fees associated with utilizing third-party providers designated by your Investment Advisor to provide administrative, management, investment, and trading services("<u>Advisor Designated Providers</u>") to Your Account (if applicable), and that you should contact your Investment Advisor for more information.

You authorize Pershing Advisor Solutions to deduct investment advisory fees (including on assets held away), Advisor Designated Provider fees (if applicable) and custody fees from Your Account. Your Investment Advisor (or Advisor Designated Provider if appropriate) and not Pershing Advisor Solutions is responsible for providing you with information regarding investment advisory fees and custody fees, and determining the initial and ongoing appropriateness of all such fees that may be charged to Your Account(s). Pershing Advisor Solutions does not review the accuracy or validity of Your Investment Advisor's (or any Advisor Designated Provider's) fee payment instructions. You acknowledge and agree to the provisions of Section IV, Paragraph B of the Terms and Conditions of this Agreement.

Disbursements. You authorize Pershing to make disbursements as provided in Section IV, Paragraph C of the Terms and Conditions of this Agreement.

Omission of any of the information requested in this application may be grounds for denial or can delay the approval of Your Account.

The material in the following box does not apply to nonresident aliens or other foreign entities/persons (please see W-8 series of forms). For further information concerning tax classifications of entities, please visit the IRS website (www.irs.gov) and review W-9 instructions.

Taxpayer Certification

Under penalties of perjury, I certify that:

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

Certification instructions.

You must cross out Item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. If you are an exempt payee (if you are unsure, ask us for a complete set of IRS instructions), enter your exempt payee code (if any) here:

If you are exempt from FATCA reporting (if you are unsure, ask us for a complete set of IRS instructions), enter your exemption from FATCA reporting code (if any) here:

Definition of a U.S. person.

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

- An individual who is a U.S. citizen or U.S. resident alien,
- A partnership, corporation, company or association created or organized in the United States or under the laws of the United States,
- An estate (other than a foreign estate), or
- A domestic trust (as defined in Regulations section 301.7701-7)

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

BY SIGNING THIS AGREEMENT YOU ACKNOWLEDGE THAT SECURITIES NOT FULLY PAID FOR MAY BE LOANED TO PERSHING OR LOANED OUT TO OTHERS. IF YOU OR YOUR REPRESENTATIVE CHECKED THE MARGIN BOX, YOU ACCEPT THE TERMS OF THE PERSHING LLC MARGIN AGREEMENT, AND ACKNOWLEDGE THAT YOU HAVE READ AND UNDERSTOOD THE MARGIN DISCLOSURE STATEMENT WHICH DETAILS THE RISKS ASSOCIATED WITH A MARGIN ACCOUNT.

PLEASE NOTE THAT THIS AGREEMENT CONTAINS A PREDISPUTE ARBITRATION AGREEMENT IN SECTION IV, PARAGRAPHS Y AND Z ON PAGE 9 OF THE TERMS AND CONDITIONS ACCOMPANYING THIS AGREEMENT. YOU ACKNOWLEDGE RECEIVING A COPY OF THIS AGREEMENT.

By signing this Agreement, you affirm that you are of full legal age in the state or jurisdiction in which you reside and have the capacity to enter into this Agreement. You further affirm that you have read, understood and agree to the Terms and Conditions attached to this Agreement. Electronic signatures have the same legal effect, validity or enforceability as a manually executed signature or physical delivery thereof, to the extent and as provided for in any applicable law.

Account holder listed in Step 2. Primary Account Holder Information must sign first below.

Authorized Signer 1 Print Name Date Signature X

Authorized Signer 2

Print Name [Date
Signature	
X	