

Open an Account

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 1. ACCOUNT DETAILS

Account Title (name of this account)	Account Number
Client Name	
Short Name	Investment Professional Number

TYPE OF ACCOUNT	ADDITIONAL REQUIRED PAPERWORK
<input type="checkbox"/> Individual	See New Accounts Requirement document
<input type="checkbox"/> Individual Transfer on Death	Individual Transfer on Death Account Agreement
<input type="checkbox"/> Joint Tenant	Joint Account Agreement, See Joint Accounts section on page 2
<input type="checkbox"/> Joint Transfer on Death	Joint Transfer on Death Account Agreement
Custodial: <input type="checkbox"/> UGMA <input type="checkbox"/> UTMA	See Custodial Accounts section on page 2
Trust: <input type="checkbox"/> Revocable <input type="checkbox"/> Irrevocable Additional Distinction: <input type="checkbox"/> Testamentary <input type="checkbox"/> Family <input type="checkbox"/> Charitable <input type="checkbox"/> Living	Trustee Certification of Powers
<input type="checkbox"/> Sole Proprietor	Declaration of Sole Propriety
Corporation: <input type="checkbox"/> C Corp <input type="checkbox"/> S Corp	Certificate of Corporate/LLC/Non Profit Organization Resolution, Articles of Incorporation
LLC: <input type="checkbox"/> C Corp <input type="checkbox"/> S Corp <input type="checkbox"/> Partnership <input type="checkbox"/> Disregarded Entity _____ (Name of Owner*)	See New Accounts Requirement document For a single-member LLC, that is disregarded, do not check LLC, check the appropriate account type for the owner of the disregarded entity
<input type="checkbox"/> Individual Single Member LLC	See New Accounts Requirement document
<input type="checkbox"/> Non Profit Organization	Formation documents/charter, Corporate/LLC/Nonprofit Organization Resolution, proof of 501(c)(3) status, and other entity documents that may be required
<input type="checkbox"/> Partnership	Partnership Certification of Powers, Certificate of Limited Partnership
<input type="checkbox"/> Estate — Person or entity appointed to act on behalf of the account: <input type="checkbox"/> Administrator <input type="checkbox"/> Personal Representative <input type="checkbox"/> Executor/Executrix Number appointed to act on account _____	Certified Copy of Death Certificate, Affidavit of Domicile, Letters of Testamentary or Court Appointment, other documents may be required
<input type="checkbox"/> 529 Plan Account	529 Plan Account Application
<input type="checkbox"/> Pershing LLC IRA (Inherited, Traditional, Rollover, Roth, SEP, SIMPLE)	Adoption Agreement and Plan Documents, See New Accounts Requirement document
<input type="checkbox"/> Other Pershing LLC Retirement Accounts (Profit Sharing Plan, Money Purchase Plan, 403[b][7], 401[k], Individual [K])	Adoption Agreement and Plan Documents, additional paperwork may be required, See New Accounts Requirement document
<input type="checkbox"/> Non Pershing Retirement Account	Trustee Certification of Powers
<input type="checkbox"/> Other: _____	See New Accounts Requirement document

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

FOR ADVISOR USE ONLY:

Select One: ☐ Transaction-based pricing (default) ☐ Asset-based pricing ☐ Program name _____

Enter your DTC identification # for duplicate confirms _____

Account Mnemonic _____ Use PRX##DIR to direct proxies to the address of record.



PERSHING ADVISOR SOLUTIONS LLC

Account Number

Brokerage Type ☐ Cash ☐ Margin: I understand that margin privileges are granted by Pershing Advisor Solutions in its sole discretion under the Terms and Conditions of this Account Application and Agreement.

For Joint Accounts Only

Are the account holders married to each other? <input type="checkbox"/> Yes <input type="checkbox"/> No	Tenancy State	Number of Tenants
Tenancy Clause <input type="checkbox"/> Community Property <input type="checkbox"/> Community Property with Rights of Survivorship <input type="checkbox"/> Tenants in Common <input type="checkbox"/> Tenants by Entirety <input type="checkbox"/> Joint Tenants with Rights of Survivorship <input type="checkbox"/> Usufruct (LA Residents only)		

For Custodial Accounts Only

State in Which Gift was Given	Date Gift Was Given <div style="border-bottom: 1px solid black; display: flex; justify-content: space-between; width: 100%;"> — — </div>	Age Designated to Terminate
Manner in Which Gift was Given		
<input type="checkbox"/> Created by gift <input type="checkbox"/> Trust <input type="checkbox"/> Exercise by appointment <input type="checkbox"/> Transfer by fiduciary or obligor <input type="checkbox"/> Will		

STEP 2. PRIMARY ACCOUNT HOLDER INFORMATION

To help the government fight the funding of terrorism and money laundering activities, federal laws require all financial organizations to obtain, verify and record information that identifies each person who opens an account. What this means for you: when you open an account, we will ask for your name, address, date of birth and other information that will allow us to identify you. We may also require a copy of your driver's license or other government-issued identifying document.

First Name	Middle Initial	Last Name	
Entity Name (if applicable)		Employer Identification Number (EIN)	
Social Security Number		Date of Birth	
Email Address			
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			

IF DISREGARDED
ENTITY, ENTER
INFORMATION FOR
THE OWNER.

PRIMARY ACCOUNT
HOLDER MAY INCLUDE
OWNER, MINOR,
WARD, EXECUTOR
OR ENTITY.

UGMA/UTMA
ACCOUNT: MINOR
IS THE PRIMARY
ACCOUNT HOLDER;
CUSTODIAN IS
THE SECONDARY
ACCOUNT HOLDER.

Citizenship

Please check only one:

☐ U.S. ☐ U.S. Resident Alien

☐ Non-Resident Alien (please provide a valid Government ID and a form W-8)

Country of legal and tax residence:

☐ U.S. ☐ Other (specify) _____

**PROOF OF ADDRESS
IS REQUIRED FOR
EACH NON-US
PERSON AND US
CITIZENS LIVING
ABROAD.**

☐ Employed ☐ Self-Employed ☐ Retired ☐ Unemployed ☐ Homemaker ☐ Student

IF EMPLOYED/
SELF-EMPLOYED
IS INDICATED,
PLEASE COMPLETE
ALL EMPLOYMENT
FIELDS.

- IF CHECKED, OBTAIN
AND ATTACH THE
COMPLIANCE
OFFICER'S LETTER
OF APPROVAL (AS
REQUIRED BY NASD
RULE 3050).

If your broker-dealer affiliation is not with the employer listed above, please provide the name and address of the affiliated entity and the nature of the affiliation below.

Nature of the Affiliation	
---------------------------	--

- ☐ 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)

**SECONDARY ACCOUNT
HOLDERS MAY
INCLUDE ADDITIONAL
ACCOUNT HOLDER,
CUSTODIAN,
CONSERVATOR,
GUARDIAN, OR
TRUSTEE/OFFICER.**

UGMA/UTMA
ACCOUNT: MINOR
IS THE PRIMARY
ACCOUNT HOLDER;
CUSTODIAN IS THE
SECONDARY ACCOUNT
HOLDER.

PERSHING ADVISOR SOLUTIONS LLC

Account Number

$$\boxed{} \boxed{} \boxed{} - \boxed{} \boxed{} \boxed{} \boxed{} \boxed{} \boxed{}$$

Citizenship

Please check only one:

☐ U.S. ☐ U.S. Resident Alien

☐ Non-Resident Alien (please provide a valid Government ID and a form W-8)

Country of legal and tax residence:

☐ U.S. ☐ Other (specify) _____

**PROOF OF ADDRESS
IS REQUIRED FOR
EACH NON-US
PERSON AND US
CITIZENS LIVING
ABROAD.**

Employment and Industry Affiliations

☐ Employed ☐ Self-Employed ☐ Retired ☐ Unemployed ☐ Homemaker ☐ Student

Employer Name	Years Employed	Occupation	
Employer's Address			
City	State/Province	Zip/Postal Code	Country

**IF EMPLOYED/
SELF-EMPLOYED
IS INDICATED,
PLEASE COMPLETE
ALL EMPLOYMENT
FIELDS.**

- ☐ Check if you are affiliated with a broker-dealer.
- ☐ Check if a member of your immediate family is affiliated with a broker dealer.

[illegible]

**IF CHECKED, OBTAIN
AND ATTACH THE
COMPLIANCE
OFFICER'S LETTER
OF APPROVAL (AS
REQUIRED BY NASD
RULE 3050).**

If your broker-dealer affiliation is not with the employer listed above, please provide the name and address of the affiliated entity and the nature of the affiliation below.

Affiliated Entity's Name and Address
Nature of the Affiliation

- ☐ 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)

**IF YES, PLEASE COMPLETE
AND ATTACH AN
ADDITIONAL ACCOUNT
HOLDER SUPPLEMENT
FORM FOR EACH
ACCOUNT HOLDER.**

Additional Account Holders

Are there more than two account holders? ☐ Yes ☐ No

STEP 4. ADDITIONAL ACCOUNT INFORMATION

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

Is this account a private banking account as defined under the USA PATRIOT Act?

☐ Yes ☐ No

Is this an account for a Foreign Bank as defined under the USA PATRIOT Act?

☐ Yes ☐ No

- If yes, is the bank a Central Bank?

☐ Yes* ☐ No

- If yes, is this a Foreign Bank operating under an Offshore Banking License?
- If yes, is this a Foreign Bank operating under a banking license issued by a Non-Cooperative Country or Territory?
- If yes, is this a Foreign Bank operating under a banking license issued by a jurisdiction subject to Section 311 measures?

☐ Yes ☐ No

☐ Yes ☐ No

100 JOURNAL

☐ Yes ☐ No

If the answer to any of the first three questions above is yes, how many people or entities own 10% or more of the Bank (if its shares are not publicly traded)?

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

**SPECIAL NOTE FOR
NON-U.S. ACCOUNTS:
WITH RESPECT TO ASSETS
CUSTODIED BY PERSHING
ADVISOR SOLUTIONS ON YOUR
BEHALF, YOU ACKNOWLEDGE
THAT INCOME AND CAPITAL
GAINS OR DISTRIBUTIONS TO
YOU FROM THIS ACCOUNT
MAY BE TAXABLE IN YOUR
HOME JURISDICTION. YOU
ACKNOWLEDGE TO YOUR
FINANCIAL ORGANIZATION
AND TO PERSHING THAT YOU
HAVE TAKEN YOUR OWN TAX
ADVICE IN THIS REGARD.**

IF NUMBER IS GREATER THAN ZERO, A FOREIGN BANK BENEFICIAL OWNERSHIP FORM MUST ACCOMPANY THIS REQUEST.

*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 5. 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.

- ☐ Gift ☐ Income From Earnings ☐ Inheritance ☐ Insurance Proceeds
☐ Investment Proceeds ☐ Legal Settlement ☐ Sale of Business ☐ Pension/IRA/Retirement Savings
☐ Other, such as lottery/gambling proceeds

Please choose the money market fund or other cash investment account in which your cash balances should be automatically invested. If you do not make a choice, all cash balances for nonretirement accounts will be automatically invested in the Dreyfus General Money Market Fund - Class B (GMMB), and for retirement accounts, in the Pershing Government Account (PGR).

**FOR IMPORTANT
INFORMATION
ABOUT EACH FUND,
PLEASE READ THE
FUND PROSPECTUS.**

NON-RETIREMENT ACCOUNTS

- ☐ Dreyfus General - Class B (GMMB)*
- ☐ Dreyfus General Government Securities - Class B (GGTB)*
- ☐ Dreyfus General Municipal- Class B (GMUB)*
- ☐ Dreyfus General Treasury Prime - Class B (GTPB)*
- ☐ Liquid Insured Deposits (RFI)
- ☐ Dreyfus Insured Deposit (DIDI)**
- ☐ Other:

*This fund requires a \$500 minimum deposit. **This fund is not available to 'for-profit' corporate accounts.

RETIREMENT ACCOUNTS

- ☐ Pershing Government Account (PGR)
☐ Pershing Prime Money Market (PPM)
☐ Pershing Prime Reserve (PPR)
☐ Pershing Treasury Account (PTA)
☐ Liquid Insured Deposits (RFI-R)
☐ Dreyfus Insured Deposit (DIDI-R)**
☐ Other:

**YOUR INVESTMENT
ADVISOR MAY
SELECT ANOTHER
FUND AND MAY
MAKE CHANGES
TO YOUR SWEEP
OPTION, INCLUDING
CHANGES BETWEEN
MONEY MARKET
FUNDS AND BANK
DEPOSIT PRODUCTS.**

STEP 6. 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 (FIFO)—will be used.

**YOUR INVESTMENT
ADVISOR MAY
CHOOSE TO CHANGE
THE DEFAULT TAX
LOT METHODOLOGY.**

DISPOSITION METHODS FOR MUTUAL FUNDS

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

DISPOSITION METHODS FOR STOCKS IN PERSHING'S DIVIDEND REINVESTMENT PLAN

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

DISPOSITION METHODS
FOR ALL OTHER SECURITIES

- ☐ First In, First Out (FIFO)
- ☐ High Cost
- ☐ High Cost Long-Term
- ☐ High Cost Short-Term
- ☐ Last In, First Out (LIFO)
- ☐ Low Cost
- ☐ Low Cost Long-Term
- ☐ Low Cost Short-Term
- ☐ Minimize Short-Term Gains

STEP 7. BOND ELECTIONS

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

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

**IF YOU DO NOT
CHOOSE BOND
ELECTIONS, THE
NOTED IRS DEFAULTS
WILL BE SELECTED.**

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 8. ELECTRONIC DELIVERY OF DOCUMENTS

For your convenience, brokerage account statements, trade confirmations, prospectuses, account notifications and other documents will be delivered to you electronically. You will be notified by e-mail when documents become available for you to retrieve online at our NetXInvestor™ website (advisor.netxinvestor.com).

**ELECTRONIC DELIVERY
IS SUBJECT TO
THE TERMS AND
CONDITIONS THAT
APPLY TO THIS
ACCOUNT APPLICATION
AND AGREEMENT.**

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

For access to NetXInvestor, please provide this required information:

Mother's Maiden Name (last name)	Date of Birth (required to establish a User ID)
	<div> <div></div> <div></div> <div>—</div> <div></div> <div></div> <div>—</div> <div></div> <div></div> <div></div> </div>
Email Address	

**A VALID EMAIL ADDRESS
MUST BE PROVIDED
FOR DELIVERY OF
NOTIFICATION EMAILS.**

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)
--------------------------------	---------------------------------

ADDITIONAL INFORMATION ABOUT ELECTRONIC DELIVERY CAN BE FOUND IN SECTION III, PARAGRAPH H OF THE TERMS AND CONDITIONS DOCUMENT THAT ACCOMPANIES THIS ACCOUNT APPLICATION AND AGREEMENT.

If you prefer to receive documents by mail, please check the appropriate box below. You may be charged fees for certain paper documents.

- ☐ Brokerage Account Statements ☐ Trade Confirmations ☐ Prospectuses ☐ Account Notifications

STEP 9. 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.

- ☐ Withhold this information from the companies in which you own stock.

STEP 10. 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.

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

STEP 11. QUARTERLY CONFIRM ENROLLMENT

☐ Check here to enroll in the quarterly confirm report in lieu of daily trade confirmations.

By signing below, you represent to Pershing LLC (“Pershing”) that your investment advisor is a fiduciary and has investment discretion over this account. By completing this section, you acknowledge that you waive your right to receive separate daily trade confirmations from Pershing and will instead receive the same information delivered on the Quarterly Confirmation Report (“QCR”). You cannot discontinue receipt of trade confirmations altogether and you must receive a trade confirmation report at least quarterly. All information contained in the daily 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 will continue to have access to daily 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 daily trade confirmations may impact your ability to promptly monitor trading activity made by your investment advisor. Your election to receive the QCR is through your own choice and you assume full responsibility for this election. You may rescind this instruction at any time and for any reason and return to receiving daily trade confirmations by contacting your investment advisor or Pershing.

STEP 12. PROSPECTUS MAILING INSTRUCTIONS

If you have given your Investment Advisor discretion over investment decisions, you can choose to direct the mailing of prospectus documents for transactions in Exchange Traded Funds (ETFs), Unit Investment Trust (UITs) 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 your Investment Advisor(s).

By selecting this option, you acknowledge that your Investment Advisor is the individual or entity authorized to have discretion over your investment decisions. Your Investment Advisor will automatically receive a prospectus for each initial trade. 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.

STEP 13. 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 Account Application and Agreement. You authorize Pershing Advisor Solutions to open additional accounts with the same registration in accordance with instructions received from your Authorized Advisor(s). You acknowledge that this Account Application and Agreement (including the account Registration) governs each account opened under this Account Application and Agreement (including any accounts opened as instructed by your Authorized Advisor[s]).

You have received, read and understood this Agreement (including the prior sections and the Terms and Conditions of this Account Agreement and Application, the Margin Disclosure Section (Section IV, if applicable), and the Additional Provisions for Margin Accounts (Section V, if applicable), and you agree to be bound by its 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 first-in-first-out (FIFO) method for all securities.

Margin. If you or your representative has checked the Margin box on page two, then you understand that margin privileges are granted by Pershing in its sole discretion under the Margin Disclosure Statement contained within Section IV of the Terms and Conditions of this Account Application and Agreement, all of which you have read and understand.

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

Fees. You understand that your Investment Advisor negotiates your commissions and other charges with Pershing Advisor Solutions, and that you should contact your Investment Advisor for more information.

You authorize Pershing Advisor Solutions to deduct Investment Advisory fees and Pershing Advisor Solutions fees, including management and custody fees, from your account. You acknowledge and agree to the provisions of Section III, Paragraph B of the Terms and Conditions of this Account Application and Agreement.

Disbursements. You authorize Pershing Advisor Solutions to instruct Pershing to make disbursements as provided in Section III, Paragraph C of the Terms and Conditions of this Account Application and Agreement.

Third Party Authorization. If applicable under your Investment Advisor Agreement, you have appointed your Investment Advisor to manage your Brokerage Account. In this Account Application and Agreement, you authorize Pershing Advisor Solutions to accept instructions from your Investment Advisor. By signing this document, you grant a power of attorney to your Investment Advisor.

If your Investment Advisor informs Pershing Advisor Solutions that they have entered into a services agreement with a third party firm to provide technology and administrative services for your account, as specifically defined and disclosed by your Investment Advisor in their Form ADV and/or management agreement executed with you, 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 that appear in its judgment to be 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.

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

W-9 Certification

Under penalties of perjury, I certify that:

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

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)

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: _____

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 ADVISOR SOLUTIONS OR PERSHING OR LOANED OUT TO OTHERS.

PLEASE NOTE THAT THIS ACCOUNT APPLICATION AND AGREEMENT CONTAINS A PREDISPUTE ARBITRATION AGREEMENT IN SECTION III, PARAGRAPHS Y AND Z ON PAGE 5 OF THE TERMS AND CONDITIONS ACCOMPANYING THIS ACCOUNT APPLICATION AND AGREEMENT. YOU ACKNOWLEDGE RECEIVING A COPY OF THIS ACCOUNT APPLICATION AND AGREEMENT.

By signing this agreement, you affirm that you are of full legal age in the state of 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 Account Application and Agreement.

Account Holder/Trustee/Corporate Officer Signature

Print Name	Date
Signature	____-____-____-____-____-____-____-____-____-____
X	

Joint Account Holder/Trustee Signature (if applicable)

Print Name	Date
Signature	____-____-____-____-____-____-____-____-____-____
X	

Terms and Conditions of Your Cash and Margin Accounts

PERSHING ADVISOR SOLUTIONS LLC

Overview

This document outlines the terms and conditions that apply to the Account Application and Agreement among you, Pershing LLC (Pershing), and Pershing Advisor Solutions LLC (Pershing Advisor Solutions)

I. Definitions and Relationships

- **"You"** are the Account Holder(s). Account Holder(s) may be one or more individuals or organization(s), a corporation, a joint venture(s), a partnership or a trust.
- Your **"Investment Advisor(s)"** to which you have granted authority over your Account(s) is an individual or organization serving as your registered investment advisor (RIA) or separate account manager (SAM). Your Investment Advisor(s) is responsible for managing your Account(s), and has sole responsibility for determining the appropriateness of advisory fees charged to your Account(s).
- **"Pershing Advisor Solutions"** is a broker-dealer, a member firm of the Financial Industry Regulatory Authority (FINRA), and an affiliate of Pershing. Pershing Advisor Solutions clears transactions for your Account(s) through Pershing on a fully disclosed (non-anonymous) basis.
- **"Pershing"** refers to Pershing LLC, which is a member organization of the New York Stock Exchange, Inc. (NYSE), a member of FINRA, and provides clearing services for your Account. Pershing acts as the custodian (holder of assets) for your Account(s).
- **"Your Account"** refers to your brokerage account with Pershing Advisor Solutions.
- **"Law"** means all applicable laws, rules, regulations and ordinances, and all binding orders of any court, agency or other governmental body with appropriate authority, as amended.
- **"Securities, Commodities, and other Property"** includes, but is not limited to, any money, securities, as well as commodities of every kind and all contracts and options relating to them, whether for present or future delivery, that may be held in your Account.
- **"BNY Mellon"** refers to BNY Mellon, National Association, a nationally chartered bank, a wholly owned subsidiary of The Bank of New York Mellon Corporation and member FDIC, which provides certain private banking products and services for your Account. BNY Mellon is an affiliate of Pershing Advisor Solutions and Pershing.
- **"Deposit Account"** means any deposit account, including, but not limited to, checking, savings or certificates of deposit held at BNY Mellon.
- **"Credit Facility"** means any credit facility, investment credit line and/or mortgage held at BNY Mellon.
- **"Account Communications"** means account statements, trade confirmations and/or other notices, disclosures and other information related to your account including without limitation prospectus, quarterly, semi-annual or annual shareholder reports, proxy statements, and legal and regulatory notices and documents.
- **"Authorized User"** means a person that You have authorized to be provided an additional user ID which enables access to your account online.
- **"Website"** means the website maintained by Pershing LLC on behalf of Pershing Advisor Solutions and your Investment Advisor that enables you to access your account information and perform other activities.

II. Roles of Pershing, Pershing Advisor Solutions, BNY Mellon and Your Investment Advisor(s)

In consideration of Pershing Advisor Solutions' accepting and introducing your Account to Pershing, which will act as the custodian for your Account(s), you understand, acknowledge and agree that:

- Pershing will maintain and custody your Account(s) as a clearing broker under a clearing agreement with Pershing Advisor Solutions.
- Until they receive written notice to the contrary signed by you, Pershing may, without inquiry or investigation, accept orders for the purchase or sale of securities and other property on margin or otherwise, and other instructions concerning your Account(s), from Pershing Advisor Solutions or your Investment Advisor(s).
- Notices about margin requirements or other matters related to your Account(s) will usually be provided to you through your Investment Advisor(s). You may be notified directly if, in Pershing's judgment, market conditions, time constraints, regulatory requirements or other circumstances require it. Neither Pershing Advisor Solutions nor Pershing has any responsibility for providing you with any disclosures that your Investment Advisor(s) is required to give you.
- Pershing Advisor Solutions conducts transactions as instructed by you and your Investment Advisor(s). The Investment Advisor(s), not Pershing Advisor Solutions nor Pershing, is responsible for managing your Account(s). Pershing Advisor Solutions and Pershing do not endorse, recommend or give advice to you or your Investment Advisor(s) with respect to investment style or strategy, nor make any determination regarding the suitability of any investment, strategy, or program.
- Pershing does not provide investment advice, nor does Pershing give advice or offer opinion in respect to the suitability of any transaction or order. You understand that Pershing Advisor Solutions is not Pershing's agent, and agree that Pershing shall not be liable for any acts or omissions of Pershing Advisor Solutions or its members, affiliates, officers, directors, employees, representatives or agents. You shall not hold Pershing, its other divisions, and its members, affiliates, officers, directors, employees, representatives or agents liable for any trading losses incurred by you.
- Pershing Advisor Solutions shall not be responsible or liable for any acts or omissions of your Investment Advisor(s) or the members, affiliates, officers, partners, directors, employees, representatives or agents of your Investment Advisor(s). Pershing Advisor Solutions and Pershing make no representation or warranty about the Investment Advisor(s) or their services. You shall not hold Pershing Advisor Solutions, its members, affiliates, officers, directors, employees, representatives or agents liable for any trading losses incurred by you.
- Pershing Advisor Solutions is not affiliated with your Investment Advisor(s), and your Investment Advisor(s) does not act as an agent of Pershing Advisor Solutions. The Investment Advisor(s) may have other business relationships with Pershing Advisor Solutions or Pershing. Unless otherwise disclosed to you, your Investment Advisor(s) is not controlled or employed by Pershing Advisor Solutions or Pershing.

- Neither Pershing Advisor Solutions nor Pershing is obligated to monitor the Investment Advisor(s) or the trading activity in any of your Account(s). Pershing Advisor Solutions and Pershing do not review or guarantee the accuracy, adequacy, or completeness of any historical performance or other information that the Investment Advisor(s) makes available to you. Pershing Advisor Solutions and Pershing shall not be responsible for the reliance by any person, including you, on any such information. The past investment performance of your Investment Advisor(s) is not a guarantee of future results.
- The Investment Advisor(s), not Pershing Advisor Solutions nor Pershing, is responsible for determining the initial and ongoing appropriateness of all fees that may be charged to your Account(s) ("Service Fees"). Neither Pershing Advisor Solutions nor Pershing mandates or determines the amount of Service Fees that the Investment Advisor(s) may charge for management of your Account(s).
- For our services as a broker-dealer, Pershing Advisor Solutions may charge fees separate from the fees and charges of your Investment Advisor(s).
- Pershing Advisor Solutions and/or your Investment Advisor(s) will provide you with the Pershing Advisor Solutions Disclosure Statement and Schedule of Charges, which are considered to be fully a part of this client Agreement. The Disclosure Statement explains the roles and responsibilities of Pershing Advisor Solutions, Pershing, and your Investment Advisor(s) in greater detail. The Disclosure Statement also contains other important provisions regarding your Account(s), including Pershing Advisor Solutions' privacy policy and business continuity plan.
- BNY Mellon will make available banking custody and banking services for your Account. BNY Mellon does not endorse, recommend or give advice to you or your Investment Advisor(s) with respect to investment style or strategy, nor make any determination regarding the suitability of any investment, strategy, or program. BNY Mellon is not affiliated with your Investment Advisor(s), and your Investment Advisor(s) does not act as an agent of BNY Mellon. The Investment Advisor(s) may have other business relationships with BNY Mellon. Unless otherwise disclosed to you, your Investment Advisor(s) is not controlled or employed by BNY Mellon.

III. Agreement for all Accounts

A. Accounts. You are requesting that Pershing Advisor Solutions open a brokerage account(s) in the names listed as account owners on the Account Agreement you submitted. You represent that you have received, read, and understood this agreement (including the Margin Disclosure Statement), and that you agree to be bound by the terms of the agreement as amended. You understand that Pershing Advisor Solutions may send new and updated disclosures regarding your Account(s). You also agree that Pershing Advisor Solutions may provide information regarding this account to your Investment Advisor(s).

B. Fees. You understand that your Investment Advisor(s) negotiates your commissions and other charges with Pershing Advisor Solutions. You should contact your Investment Advisor for more information.

You authorize Pershing Advisor Solutions to deduct Investment Advisory fees and Pershing Advisor Solutions fees, including management and custody fees, from your account. You acknowledge that Pershing Advisor Solutions fees may change at any time, and that they are separate from advisory fees charged by your Investment Advisor. You also understand that you are not entitled to any fee rebates if your account(s) are cancelled or liquidated during a period for which fees have already been charged.

You understand that your Investment Advisor may recommend that you purchase mutual funds or other investment products, and that Pershing Advisor Solutions and its affiliates may receive servicing, distribution or other revenues from mutual funds (whether affiliated with Pershing Advisor Solutions or not).

In addition, Pershing Advisor Solutions may pay administrative and marketing fees to other entities, including FINRA-registered broker-dealer firms. Under FINRA rules, these broker-dealer firms are responsible for supervising their Registered Representatives, including the monitoring of brokerage transactions in the accounts of the clients of the firm and their Registered Representatives. These Registered Representatives may also be associated and registered with, and conduct advisory business through, a registered investment adviser firm that is unaffiliated with the Registered Representative's broker-dealer.

C. Disbursements. You authorize Pershing Advisor Solutions to instruct Pershing to:

- (1) Disburse assets for your benefit or to you personally, as instructed by your Investment Advisor(s);
- (2) Remit checks to you at your address of record;
- (3) Wire funds and make disbursements of funds held in your Account(s) based on any standing instructions on file with Pershing Advisor Solutions; and
- (4) Make fund transfers between your Account(s) at the direction of your Investment Advisor(s).

If this account is a Trust, the Trustee(s) signing this Account Application and Agreement certify that the Trust authorizes the Trustee to receive on behalf of the Trust or deliver to the Trust or third parties including to the Trustee(s) individually any and all assets in this account, including, but not limited to, monies, stocks, bonds and other securities. Also to sell, assign and endorse for transfer, certificates representing stocks, bonds or other securities now registered or hereafter registered in the name of the Trust.

If you want funds disbursed from your Account(s) by check, wire or other form to a financial organization not on file with Pershing Advisor Solutions or to a third party, you agree to provide a written letter of authorization for each disbursement request. Pershing Advisor Solutions may contact you to confirm your authorization before making a disbursement.

D. Applicable Rules and Regulations. All transactions executed for your Account by Pershing Advisor Solutions, its affiliates or agents, including Pershing, are subject to applicable Laws, rules and regulations of the Securities and Exchange Commission ("SEC"), FINRA, and any other regulatory or self-regulatory agency or organization.

E. Lien. If you become indebted or otherwise obligated to Pershing or Pershing Advisor Solutions, then all securities, commodities, and other property that Pershing may be carrying for you, or that may be in Pershing's possession or under Pershing's control, will be subject to a general lien and security interest in Pershing's favor. These assets can be used to satisfy your debt and other obligations to Pershing Advisor Solutions or Pershing. This applies regardless of any advances made by Pershing in connection with those securities and other property, and no matter how many accounts you may have with Pershing Advisor Solutions and carried at Pershing.

In enforcing its lien, Pershing will determine which securities and property are to be sold and which contracts are to be closed. However, securities and other property you hold in retirement account(s) maintained by Pershing, which may include IRAs or qualified plans, are not subject to this general lien. Retirement account funds may be used only to satisfy your debt or other obligations to Pershing Advisor Solutions and/or Pershing that relate to your retirement account(s).

F. Payment of Indebtedness Upon Demand. You are liable for payment on demand of any debit balance or other obligations owed in any of your Account(s). If any deficiency remains after liquidating any part of your Account(s), you will pay the balance to Pershing Advisor Solutions and/or Pershing on demand.

G. Delivery of Communications. Communications may be sent to you at your current postal or email address on file at Pershing Advisor Solutions' office, or to another address you give Pershing Advisor Solutions in writing. All communications, whether by mail, messenger, email or otherwise, shall be deemed as given to you personally whether you actually receive them or not.

H. Website Access Terms and Conditions; Electronic Delivery Consent. (I) You expressly agree and acknowledge that your use and any Authorized Users' use of the Website is subject to the terms and conditions of use that are posted on Pershing's NetXInvestor website and/or the Website, including without limitation any disclaimers of warranties and other notices therein. Such terms and conditions may be amended from time to time by posting them on Pershing's NetXInvestor website and/or the Website. Continued use of the Website by You or your Authorized Users will constitute your acceptance of the then-current terms and conditions.

Pershing Advisor Solutions will provide a user ID and password for accessing your Website. You agree that You are solely responsible for: (a) safeguarding and keeping confidential your password and user IDs that You and your Authorized Users use to access the Website and any information that is retrieved from the Website. You agree that You and your Authorized Users will only access the Website from devices with industry standard anti-virus/anti-malware protection. You agree to accept responsibility for all activities that occur under such user ID(s) or password(s).

You agree to immediately notify your Investment Advisor if: (i) the passwords or user IDs are lost or stolen, or (ii) You become aware of any unauthorized use of the passwords, user IDs, or access to Your Accounts that may be related to your use of the Website. You agree that the providers of the Website are not liable for any loss or damage arising from any activity that occurs via the use of your password and/or user ID.

Use of this online service is at your sole risk. The Website service provided herein is on an "as is," "as available" basis and without warranties including, without limitation, those of merchantability, fitness for a particular purpose or non-infringement, other than those warranties which are implied by and incapable of exclusion, restriction or modification under the Laws applicable to this Website service. Neither Pershing Advisor Solutions, Pershing, nor their respective members, affiliates, officers, directors, employees, representatives, agents, contractors, information providers or services, warrants timeliness, sequence, accuracy, completeness, reliability or content of electronic information or that Website service will be uninterrupted or error free. You agree to abide by this agreement as it may be amended from time to time; amended terms will be posted on the Website. You agree that Pershing or your Investment Advisor may send notices related to online activity in Your Account to the email address(es) that You have provided directly to your Investment Advisor or by registering on the Website.

(II) You agree that your Investment Advisor, Pershing Advisor Solutions and Pershing may make the Account Communications available in an electronic form as described herein instead of mailing them in paper form.

Account Communications will be made available to You online via a Website maintained by Pershing on behalf of Pershing Advisor Solutions and your Investment Advisor. Account communications will be available in portable document format (PDF). You affirm that

You have installed a recent version of Adobe Acrobat Reader or other software application that enables You to view and print your Account Communications. You may print or save a copy of any of the Account Communications at any time. You may request a mailed copy of any of your Account Communications by contacting Pershing Advisor Solutions or your Investment Advisor.

An electronic mail ("email") notification will be sent when Account Communications are available to be accessed on the Website. The email will provide You with the URL of the Website. The email notification(s) will be sent to the email address(es) You provided directly to your Investment Advisor or provided by registering on the Website. You may view and verify your email address(es) via the Website, and change the email address(es) through the Website or by contacting your Investment Advisor.

In the event of an email notification failure as defined by Pershing, Pershing may discontinue electronic delivery and mail your Account Communications in paper form until You re-enroll through the Website. If You lose access to the Website, You should contact your Investment Advisor to have your access reinstated. By providing this Electronic Delivery Consent, You affirm that You have provided a valid email address directly to your Investment Advisor or by registering on the Website, have access to the Internet and are at least 18 years of age. You agree that electronic delivery of the Account Communications is deemed accepted, regardless of whether You access or view a particular account communication document. You acknowledge that any Authorized Users for Your Account are able to make changes to the electronic delivery settings for Your Account, and You agree to accept responsibility for such changes.

This Electronic Delivery Consent is effective until revoked. You may revoke your consent and resume receiving paper Account Communications by changing your delivery preferences by following the instructions on the Website, or by contacting your Investment Advisor directly for assistance.

If You do not want to receive documents electronically, You must check the appropriate box(es) in the "Electronic Delivery of Documents" Step of the Account Application and Agreement or change your paperless preferences on the Website. Please note that Pershing Advisor Solutions may charge fees for sending your paper documents.

I. Scope and Transferability. This agreement covers all of the Account(s) you may open or reopen with Pershing Advisor Solutions. It also applies to Pershing's and Pershing Advisor Solutions' successors, whether by merger, consolidation or otherwise, and their assigns. Pershing's and Pershing Advisor Solutions' successors may transfer your Account(s) to their respective successors and assigns. This agreement will be binding on your heirs, executors, administrators, successors, and assigns.

J. Reliance on Investment Advisor(s). You authorize Pershing Advisor Solutions and Pershing to act on the instructions of your Investment Advisor(s), without any duty to inquire as to their accuracy or suitability, or to verify those instructions with you.

K. No Professional Advice. You acknowledge that Pershing Advisor Solutions, Pershing and BNY Mellon will not provide you with any advice, including but not limited to, investment, legal, tax or accounting, and that their employees are not authorized to give any such advice. You agree not to solicit or rely upon any such advice from Pershing, BNY Mellon or Pershing Advisor Solutions or their employees, whether in connection with transactions in or for any of your Account(s) or otherwise. In making investment, legal, tax, or accounting decisions with respect to transactions in or for your Account(s) or any other matter, you will consult with and rely upon your own advisors and not Pershing Advisor Solutions. Pershing Advisor Solutions, Pershing and BNY Mellon shall not be liable for any such advice or decisions.

L. Extraordinary Events. Pershing Advisor Solutions and Pershing shall not be liable for any losses caused directly or indirectly by government restrictions and/or regulations, exchange or market rulings, suspension of trading, war, terrorism, strikes, or other conditions beyond our control.

M. Capacity to Enter into Agreement. Unless disclosed to Pershing Advisor Solutions, you represent that you are of full legal age, and that you are not employed by any broker-dealer firm or any entity that regulates a broker-dealer firm, including but not limited to FINRA or any stock exchange.

N. Proxies and Corporate Mailings. Unless you indicated otherwise in Step 9 of the Account Application and Agreement, Pershing Advisor Solutions will direct all proxies and corporate mailings (including corporate action notifications) to your Investment Advisor(s). Pershing Advisor Solutions understands that your Investment Advisor has agreed to vote (or act on) corporate mailings subject to your consent. But unless you agree otherwise, your Investment Advisor will not be authorized to take action or render any advice involving litigation or prospective litigation (including class action) or bankruptcies regarding securities or other investments held in your Account(s), or of their issuers. You should take any litigation, prospective litigation and bankruptcies into consideration, obtain advice if you believe it is appropriate, and respond as required.

You or your Investment Advisor may instruct Pershing Advisor Solutions to direct proxies and corporate mailings to you by sending us separate written directions. In that case, you will be able to vote (or act on) these materials as you see fit.

O. Joint Accounts. Unless you specify otherwise, Pershing Advisor Solutions may assume that your Joint Account(s) is held by all of you jointly with rights of survivorship (payable to either you or to your survivor). Each joint tenant irrevocably appoints the other as attorney-in-fact to take actions on his or her behalf and to represent him or her in connection with this agreement. Pershing Advisor Solutions is fully protected in acting, but is not required to act, on the instructions of any of you in sending Documents or other communications to any of you, or in dealing with any of you. Each of you is liable, jointly and individually, for any amounts due to Pershing Advisor Solutions under this agreement, whether incurred by either or all of you. In its discretion, Pershing Advisor Solutions may require all joint account holders to sign any document or to furnish written instructions with respect to any action.

P. Mutual Fund Transactions. You may be charged a transaction fee when purchasing and selling mutual fund shares within your Account(s). Mutual fund shares can be purchased and sold directly from a fund without paying transaction fees.

Q. Severability. If any provision or condition of this agreement is held to be invalid, illegal, unenforceable or in conflict with the law of any jurisdiction by any court, regulatory or self-regulatory agency or body, the remaining provisions will continue to be valid, legal and enforceable.

R. Headings are Descriptive. The headings in this agreement are inserted as a matter of convenience only and do not define, limit, or describe the scope of this agreement or the intent of its provisions.

S. Recording Conversations. You agree that for our mutual protection, Pershing Advisor Solutions may electronically record any telephone conversations conducted between you and Pershing Advisor Solutions employees.

T. Entire Agreement. This agreement and the enclosed Account Agreement, along with all other attachments, is the full and complete understanding between you and Pershing Advisor Solutions; no oral or other agreements conflict with it.

U. Termination. You agree that Pershing Advisor Solutions has the right to terminate your Account(s) at any time by notice to you. The provisions of this agreement will survive the termination of your Account(s).

V. Amendment or Waiver. You agree that Pershing Advisor Solutions may amend, change, revise, add or modify this agreement at any time. The current version of the Agreement will be posted on www.pershingadvisorsolutions.com, and you understand that your continued account activity or the act of not closing your account after such modification constitutes your acceptance to be bound by all modifications to this agreement.

W. Governing Law. The laws of the State of New York shall govern this agreement and its enforcement, without giving effect to its conflicts of laws provisions.

X. Privacy. Pershing Advisor Solutions does not sell information about current or former clients to third parties, nor does it disclose information to third parties unless it is necessary to process a transaction, maintain your Account(s), is otherwise permitted or required by law or as is otherwise permitted in this agreement. Pershing Advisor Solutions may share non-public personal information with third parties affiliated with either your Investment Advisor(s) or Pershing Advisor Solutions. Pershing Advisor Solutions may also share your Account(s) information with third parties hired by your Investment Advisor(s) or Pershing Advisor Solutions to provide account management services. If you apply for, request or establish a Credit Facility or Deposit Account with BNY Mellon the following additional terms and conditions regarding your privacy will apply:

1. You authorize (a) BNY Mellon, Pershing Advisor Solutions and Pershing to discuss and share any and all of your personal information held in their books, records or systems, including creditworthiness, with respect to your relationship with each affiliate ("Information") without limitation and (b) your Investment Advisor to discuss and share any and all of your Information with BNY Mellon without limitation. BNY Mellon, Pershing Advisor Solutions and Pershing are each a subsidiary of The Bank of New York Mellon Corporation. You acknowledge Pershing Advisor Solutions does not and will not collect or retain information outside of information collected in its normal course of business, including, but not limited to, tax records, income information and outside asset holdings that may be used by BNY Mellon.
2. You grant to your Investment Advisor the right to request and receive any and all information pertaining to any Deposit Account and/or Credit Facility at BNY Mellon, including, but not limited to, the right to request information on all Credit Facility activity, borrowing and usage information, payment history, rate and modification information and copies of Credit Facility statements. This authorization is in addition to and in no way limits or restricts any rights that the Investment Advisor may have under any other agreement(s) between you and the Investment Advisor, you and Pershing Advisor Solutions or the Investment Advisor and Pershing Advisor Solutions. The authorization contained in this agreement is a continuing one and shall remain in full force and effect until revoked by you in writing.
3. If the Investment Advisor is not a natural person, the names of those individuals authorized to act on behalf of the Investment Advisor are as set forth in the "Please Read and Sign" Step of this agreement. You shall request the Investment Advisor to inform BNY Mellon in writing of any changes to the list of authorized individuals. BNY Mellon may rely on the list of authorized persons provided by you or Investment Advisor without further inquiry. The list shall be signed by an authorized person of the Investment Advisor. You agree it is the Investment Advisor's sole responsibility to ensure its respective

designation of authorized persons with authority to act on behalf of the Investment Advisor remains current and BNY Mellon shall not be liable for the use of or access to client data by such authorized persons.

4. You or BNY Mellon may terminate subparagraphs 1 through 3 of this Paragraph X at any time by providing written notice to the other. If you terminate these provisions, BNY Mellon may require repayment in full of any outstanding indebtedness and may terminate any outstanding Credit Facility. All notices sent shall be directed to you at your address of record as specified in this agreement and if to BNY Mellon: BNY Mellon, 500 Ross Street, Suite 655, Pittsburgh, PA 15262.

Pershing Advisor Solutions maintains physical, electronic, and procedural safeguards to protect your personal information. Within Pershing Advisor Solutions, access to this information is limited to only those employees of Pershing Advisor Solutions who need to know it in order to perform their job functions. All Pershing Advisor Solutions employees are required to keep all client information strictly confidential.

For additional information about the Pershing Advisor Solutions Privacy Policy, please review the disclosures on our website at www.pershingadvisorsolutions.com.

Prohibition Against Unlawful Internet Gambling. In accordance with the Unlawful Internet Gambling Enforcement Act of 2006, transactions associated with unlawful internet gambling are prohibited. The Act prohibits any person engaged in the business of betting or wagering from knowingly accepting payments in connection with the participation of another person in unlawful internet gambling. Accordingly, you must not initiate or receive wire transfers, checks, drafts or other debit/credit transactions that are restricted by the Act. For more information, please refer to: www.federalreserve.gov/newsevents/press/bcreg/20081112b.htm.

Y. ARBITRATION DISCLOSURES. THIS AGREEMENT CONTAINS A PREDISPUTE ARBITRATION CLAUSE. BY SIGNING AN ARBITRATION AGREEMENT THE PARTIES AGREE AS FOLLOWS:

- **ALL PARTIES TO THIS AGREEMENT ARE GIVING UP THE RIGHT TO SUE EACH OTHER IN COURT, INCLUDING THE RIGHT TO A TRIAL BY JURY, EXCEPT AS PROVIDED BY THE RULES OF THE ARBITRATION FORUM IN WHICH A CLAIM IS FILED.**
- **ARBITRATION AWARDS ARE GENERALLY FINAL AND BINDING; A PARTY'S ABILITY TO HAVE A COURT REVERSE OR MODIFY AN ARBITRATION AWARD IS VERY LIMITED.**
- **THE ABILITY OF THE PARTIES TO OBTAIN DOCUMENTS, WITNESS STATEMENTS, AND OTHER DISCOVERY IS GENERALLY MORE LIMITED IN ARBITRATION THAN IN COURT PROCEEDINGS.**
- **THE ARBITRATORS DO NOT HAVE TO EXPLAIN THE REASON(S) FOR THEIR AWARD, UNLESS, IN AN ELIGIBLE CASE, A JOINT REQUEST FOR AN EXPLAINED DECISION HAS BEEN SUBMITTED BY ALL PARTIES TO THE PANEL AT LEAST 20 DAYS PRIOR TO THE FIRST SCHEDULED HEARING DATE.**
- **THE PANEL OF ARBITRATORS WILL TYPICALLY INCLUDE A MINORITY OF ARBITRATORS WHO WERE OR ARE AFFILIATED WITH THE SECURITIES INDUSTRY.**
- **THE RULES OF SOME ARBITRATION FORUMS MAY IMPOSE TIME LIMITS FOR BRINGING A CLAIM IN ARBITRATION. IN SOME CASES, A CLAIM THAT IS INELIGIBLE FOR ARBITRATION MAY BE BROUGHT IN COURT.**
- **THE RULES OF THE ARBITRATION FORUM IN WHICH THE CLAIM IS FILED, AND ANY AMENDMENTS TO IT, SHALL BE INCORPORATED INTO THIS AGREEMENT.**

Z. ARBITRATION AGREEMENT. ANY CONTROVERSY BETWEEN YOU AND PERSHING ADVISOR SOLUTIONS AND/OR YOU AND PERSHING SHALL BE SUBMITTED TO ARBITRATION BEFORE THE FINANCIAL INDUSTRY REGULATORY AUTHORITY.

NO PERSON SHALL BRING A PUTATIVE OR CERTIFIED CLASS ACTION TO ARBITRATION, NOR SEEK TO ENFORCE ANY PREDISPUTE ARBITRATION AGREEMENT AGAINST ANY PERSON WHO HAS INITIATED IN COURT A PUTATIVE CLASS ACTION; OR WHO IS A MEMBER OF A PUTATIVE CLASS WHO HAS NOT OPTED OUT OF THE CLASS WITH RESPECT TO ANY CLAIMS ENCOMPASSED BY THE PUTATIVE CLASS ACTION UNTIL; (I) THE CLASS CERTIFICATION IS DENIED; (II) THE CLASS IS DECERTIFIED; OR (III) THE CUSTOMER IS EXCLUDED FROM THE CLASS BY THE COURT. SUCH FORBEARANCE TO ENFORCE AN AGREEMENT TO ARBITRATE SHALL NOT CONSTITUTE A WAIVER OF ANY RIGHTS UNDER THIS AGREEMENT EXCEPT TO THE EXTENT STATED HERE.

THE LAWS OF THE STATE OF NEW YORK GOVERN.

AA. Prime Brokerage. Pershing Advisor Solutions allows your Investment Advisor(s) to place orders for the execution of trades with broker-dealers other than Pershing Advisor Solutions. You acknowledge that you or your Investment Advisor(s) are responsible for selecting these other brokers, and that Pershing Advisor Solutions makes no representation regarding their financial condition or ability. Pershing Advisor Solutions may reject any executing broker proposed by you or your Investment Advisor(s) or terminate any previously accepted executing broker for any reason at any time. If Pershing Advisor Solutions does so, it will inform you or your Investment Advisor(s) in a timely manner.

You authorize Pershing Advisor Solutions to collect and transmit prime brokerage trade orders and other instructions from you or your Investment Advisor(s) on an ongoing basis, and you agree to allow Pershing Advisor Solutions to access reports, data, and services. You authorize Pershing Advisor Solutions to advise the executing brokers if your Account(s) is not in compliance with any net equity requirement for prime brokerage currently in effect at Pershing Advisor Solutions, to send a notice of disaffirmance of any executing broker's trade to that broker, and to transmit your name to each executing broker as an underlying client of your Investment Advisor(s).

Commissions and/or fees may apply to the execution of transactions through other broker-dealers that you would not incur if the transaction were executed directly through Pershing Advisor Solutions, including additional fees charged by Pershing Advisor Solutions. You agree that your Account(s) may be assessed a prime brokerage fee if your Investment Advisor(s) trades away from Pershing Advisor Solutions; you and your Investment Advisor(s) will determine responsibility for these fees.

Pershing Advisor Solutions shall be entitled to debit assets from your Account(s) on the settlement date of any trade-away order regardless of whether delivery or receipt has occurred, or to take appropriate steps to complete, cancel, or liquidate any transaction. If your Investment Advisor(s) elects to transact business with other broker-dealers, Pershing Advisor Solutions will make available, on request and at no additional charge, any confirmation sent by an executing broker-dealer to you in care of Pershing Advisor Solutions.

You understand that prime brokerage activity shall be conducted consistent with all applicable laws, rules and regulations, as well as with the SEC prime brokerage no-action letter dated January 24, 1994.

BB. Special Note for Non-U.S. Accounts. With respect to assets custodied by Pershing on your behalf, you acknowledge that income, capital gains or distributions from this account may be taxable in your home jurisdiction. You acknowledge to Pershing Advisor Solutions and to Pershing that you are responsible for obtaining your own tax advice.

CC. Trading Authorization. Your Investment Advisor(s) is authorized to buy and sell (including short sales) equities, bonds, option contracts, and any other related securities, including selecting a money fund or bank deposit product as a sweep option in your account, and/or contracts, on margin or otherwise, in accordance with this agreement and the policies of Pershing Advisor Solutions. For all purchases and sales, Pershing Advisor Solutions is authorized to follow all your Investment Advisor(s)' instructions. Except as herein otherwise provided, the Investment Advisor(s) is authorized to act for Pershing Advisor Solutions in the same manner and with the same force and effect as you might or could do with respect to such purchases and sales, as well as with respect to all other things necessary or incidental thereto including the changing of your sweep instruction, which may include changes between money market funds and bank deposit products, voting of proxies or effectuating tenders, exchanges, or redemptions, or other similar actions (or acting on corporate mailings) with respect to securities held in your account, except as previously provided to the Investment Advisor(s). However, the Investment Advisor(s) will not be obligated to take action or render any advice involving legal action, on behalf of Pershing Advisor Solutions, with respect to Securities, Commodities and other Property held in your Account, or the issuers thereof, which become the subject of legal notices or proceedings, including bankruptcies.

You also authorize the Investment Advisor(s) in its discretion to aggregate purchases and sales of securities for your Account with those of the same issuer for other clients occurring on the same day. When transactions are aggregated in this way, all participating clients of your Investment Advisor(s) will be deemed to have purchased or sold their proportionate shares at the average transaction price.

If this agreement is entered into by a trustee or other fiduciary, including someone meeting the definition of fiduciary under the Employee Retirement Income Security Act of 1974 (ERISA) or an employee benefit plan subject to ERISA, the fiduciary warrants that the execution of this Trading Authorization is permitted by the plan's relevant governing instrument, and that the fiduciary is duly authorized to enter into this agreement. The fiduciary agrees to furnish relevant plan documents to Pershing Advisor Solutions or the Investment Advisor(s) on request. The fiduciary agrees to advise them of any event that might affect this authority or the validity of this agreement. The fiduciary also warrants (i) that your governing instruments provide that an "investment manager" (as defined in ERISA) may be appointed, and (ii) that the person executing and delivering this agreement is a "named fiduciary" (as defined in ERISA) who has the power under the plan to appoint an investment manager. The Investment Advisor(s) is that investment manager.

IV. Agreement for Margin Accounts

Margin Disclosure Statement. Before entering any trades in a margin account, it is important that you carefully review this Margin Account Agreement provided by Pershing Advisor Solutions via its arrangement with Pershing LLC and to consult with your Investment Advisor(s) regarding any questions or concerns you may have. It is important to fully understand the risks involved in trading securities on margin. These risks include but are not limited to the following:

You can lose more funds or securities than you deposit in the margin account.

A decline in value of securities that are purchased on margin may require you to provide additional funds to Pershing to avoid the forced sale of those securities or other securities or assets in your account(s).

Pershing can force the sale of securities or other assets in your account(s).

If the equity in your account falls below Pershing's maintenance margin requirements, Pershing can sell the securities or other assets in any of your account(s) held at Pershing to cover the margin deficiency. You also will be responsible for any shortfall in the account after such a sale.

Pershing can sell your securities or other assets without contacting you.

Some investors mistakenly believe that a financial organization must contact them for a margin call to be valid, and that the financial organization cannot liquidate securities or other assets in their accounts to meet the call unless the financial organization has contacted them first. This is not the case. Most financial organizations will attempt to notify their clients of margin calls, but they are not required to do so. However, even if a financial organization has contacted a client and provided a specific date by which the client can meet a margin call, the financial organization can still take necessary steps to protect its financial interests, including immediately selling the securities without notice to the client.

Pershing may change margin requirements or margin call time periods without notice to you.

In regard to house, maintenance and other margin calls, in lieu of immediate liquidations, Pershing may permit you a period of time to satisfy a call. This time period shall not in any way waive or diminish Pershing's right, in its sole discretion, to shorten the time period in which you may satisfy a call, including one already outstanding, or to demand that a call be satisfied immediately. Nor does such practice waive or diminish the right of Pershing to sell out positions to satisfy the call, which can be as high as the full indebtedness owed by you. Margin requirements may be established and changed by Pershing in its sole discretion and judgment.

You are not entitled to choose which securities or other assets in your brokerage account(s) are liquidated or sold to meet a margin call.

Because the securities are collateral for the margin loan, Pershing has the right to decide which security to sell in order to protect its interests. Pershing can increase its "house" maintenance margin requirements at any time, and is not required to provide you with advance written notice. These changes in firm policy often take effect immediately and may result in the issuance of a maintenance margin call. Your failure to satisfy the call may cause Pershing to liquidate or sell securities in your brokerage account(s).

You are not entitled to an extension of time on a margin call.

While an extension of time to meet margin requirements may be available to clients under certain conditions, a client does not have a right to the extension. This Margin Agreement is a legally binding agreement, cannot be modified by conduct and no failure on the part of Pershing at any time to enforce its rights under the Margin Agreement to the greatest extent permitted shall in any way be deemed to waive, modify or relax any of the rights granted Pershing, including those rights vested in Pershing to deal with collateral on all loans advanced to you.

Also, this Margin Agreement constitutes the full and entire understanding between the parties with respect to the provision of the Margin Agreement, and there are no oral or other agreements in conflict with the Margin Agreement unless you have advised in writing to Pershing of such conflict. Any future modification, amendment or supplement to this Margin Agreement or any individual provision of this Margin Agreement can only be in writing signed by a representative of Pershing. You should carefully review this Margin Agreement for the rights and limitations governing your margin account relationship.

When you purchase securities, commodities and other property, you have the option of paying for them in full or borrowing part of the purchase price from Pershing. If you choose to borrow funds from Pershing, you will need to open a margin account with Pershing Advisor Solutions, which will introduce such account to Pershing. The securities purchased are used as collateral for the loan that was made to you for that purchase or any other indebtedness arising after the initial transaction. If the securities, commodities and other property in your account decline in value, so does the value of the collateral supporting your loan. As a result, Pershing can take action. For example, Pershing can issue a margin call and/or liquidate securities, commodities and other properties in any of your Account(s) held with Pershing in order to maintain its required equity in the margin account.

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. Furthermore, interest paid to Pershing Advisor Solutions and Pershing under this agreement may be subject to withholding tax in your home jurisdiction. It is your obligation to pay such withholding tax, if applicable. You acknowledge to Pershing Advisor Solutions and to Pershing that you have taken your own tax advice in this regard.

THE MARGIN AGREEMENT CONTAINS A PREDISPUTE ARBITRATION CLAUSE.

V. Additional Provisions for Margin Accounts

A. Liquidation. Whenever it is necessary for the protection of Pershing Advisor Solutions to satisfy a margin call, deficiency, debit, or other obligation owed to Pershing Advisor Solutions by your Account(s), Pershing Advisor Solutions may sell any or all securities, commodities, and other property in your Account(s) with Pershing Advisor Solutions. Pershing Advisor Solutions is entitled to exercise the rights described in this section in its sole discretion, including whenever the following occurs: in the event that a petition or bankruptcy is filed, the appointment of a receiver is filed against you, an attachment is levied against you, or you die, or become incapacitated.

B. Margin Requirements, Credit Charges, Credit Investigation, and Deposits. For margin purposes, you must, at all times, maintain such securities, commodities, and other property in your Account(s) as Pershing Advisor Solutions shall require via a margin call or other request. The debit balances or adjusted balances in your Account(s) shall be charged in accordance with Pershing Advisor Solutions' practice with interest at a rate permitted by the laws of the State of New York. It is understood that, unless paid, the interest charge made to your Account(s) at the close of a charge period will be added to the opening balance for the next charge period.

Margin requirements may be established and changed by Pershing or Pershing Advisor Solutions in its sole discretion and judgment without notice to you. In making this determination, Pershing or Pershing Advisor Solutions may take into account various factors including but not limited to (i) issues as to your securities such as, among others, the liquidity of a position and concentrations of securities in an account, (ii) considerations as to your status, including but not limited to a decline in creditworthiness, (iii) the size of the account, (iv) the general condition of the market, (v) considerations as to the ability of Pershing to obtain financing, and (vi) regulatory interpretations or guidance.

You agree to contact Pershing Advisor Solutions for the latest information on margin requirements. Pershing Advisor Solutions may exchange credit information about you with others. You are hereby notified that any negative credit report reflected on your credit record with Pershing Advisor Solutions may be submitted to a credit reporting agency if you fail to fulfill the terms of your credit obligations. Pershing Advisor Solutions or Pershing may request a credit report on you and, upon request, Pershing Advisor Solutions will state the name and address of the consumer reporting agency that furnished it. If Pershing Advisor Solutions extends, updates, or renews your credit, either Pershing Advisor Solutions or Pershing may request a new credit report without telling you.

C. Option Transactions. If at any time you shall enter into any transaction for the purchase or resale of option contracts, you agree to abide by the rules of any national securities association, registered securities exchange, or clearing organization applicable to the trading of option contracts. Also, you agree that you will not violate the position or exercise limitation rules of any such association or exchange or the Options Clearing Corporation or other clearing organization.

D. Loan Consent. You acknowledge that securities not fully paid for may be loaned to Pershing Advisor Solutions, Pershing or loaned out to others, and as permitted by law, certain securities in the account, may be used for, among other things, settling short sales and lending the securities for short sales, and as a result Pershing and Pershing Advisor Solutions may receive compensation in connection therewith. Pershing Advisor Solutions and Pershing do not lend fully-paid-for securities without your written permission. Fully-paid-for securities held in a cash account (unless otherwise agreed in a separate written agreement) and fully-paid-for securities held in a margin account in which there is no debit balance are not loaned.

E. Shareholder Vote of Loaned Securities. In the event your securities have been loaned by Pershing on the record date of a shareholder vote involving those securities, you agree that the borrower and not you have the right to vote these securities. You understand that your vote may be reduced to reflect the total amount of your securities loaned by Pershing.