

J.P. Morgan Self-Directed Investing

DISCLOSURES AND BROKERAGE ACCOUNT AGREEMENT

Revised November 2023

PLEASE READ CAREFULLY

The following contains important information about your J.P. Morgan Self-Directed Investing account(s) with J.P. Morgan Securities LLC (JPMS) you opened online or through a JPMS call center. Please read this carefully and keep a copy for your records. Please note that fees and other information are subject to change. You understand that your J.P. Morgan Self-Directed Investing account (the **Account**) is a self-directed brokerage account and you will not receive any advice or guidance. The following Important Disclosures and Brokerage Account Agreement are collectively referred to as the "J.P. Morgan Self-Directed Investing Disclosures and Brokerage Account Agreement."

- A. **IMPORTANT DISCLOSURES.** The "Important Disclosures" section contains information about your investments and JPMS. We encourage you to read the entire section.
- B. **BROKERAGE ACCOUNT AGREEMENT.** This section contains the terms and conditions that govern your brokerage account(s) with JPMS. The *Brokerage Account Agreement* contains a pre-dispute arbitration clause. Refer to page 11, Section 10 of this document for more details.

IMPORTANT DISCLOSURES

I. Self-Directed Trading

This Account is self-directed, which means that you will make all investment decisions yourself and JPMS will not provide any advice, guidance or recommendations. This relationship will be conducted online through websites that JPMS makes available to you including, but not limited to, chase.com or jpmorganonline.com or through a JPMS call center (unless otherwise indicated). All orders entered by you will be considered to be unsolicited, meaning your decision to buy or sell any securities was based on your own evaluation of the merits of each investment taking into account your personal financial situation, your investment objectives and your risk tolerance.

II. Investment Basics

Certain Affiliates Are Paid For Services To J.P. Morgan Mutual Funds. JPMS, a member of the Financial Industry Regulatory Authority (FINRA) and Securities Investor Protection Corporation (SIPC), is an affiliate of JPMorgan Chase Bank, N.A. JPMorgan Chase Bank, N.A. (**Chase Bank**) and other affiliates of JPMS provide investment advisory services to J.P. Morgan Funds for a fee. J.P. Morgan Funds are distributed by JPMorgan Distribution Services, Inc., which is an affiliate of JPMorgan Chase & Co. Affiliates of JPMorgan Chase & Co. receive fees for providing various services to the funds. Please refer to the offering documents for the J.P. Morgan Funds for more information.

Consult A Professional for Tax, Legal and Other Advice Before You Invest. Transactions in investments may be subject to federal, state and/or estate taxes. Consult with your own qualified professional specific to your own circumstances. JPMS and its

affiliates do not provide legal, tax, accounting or actuarial advice to you.

SIPC Insurance Does Not Protect Against Declines in Market Value. SIPC provides limited protection over an investor's cash and/or securities if a brokerage firm fails. SIPC does not protect against declines in market value. For details, go to sipc.org.

III. Investment Risks

Investments Are Not Guaranteed. Investments are not insured by the Federal Deposit Insurance Corporation (FDIC) or any other governmental agency. They are not deposits or other obligations of, or guaranteed by, Chase Bank or any of its affiliates. Investment products and services for the Account are offered through JPMS.

Investments May Lose Value. Investments, including stocks, bonds and mutual funds, are subject to risks, including possible loss of the amount invested. The value of investments may fluctuate, so when you sell your investments, you may receive more or less than you originally invested. You understand that certain investments may be more suitable for long-term investors who can bear the risk of market fluctuations and that it is important to read the prospectus or other investment materials carefully before investing.

IV. Fees and Expenses

Investments Involve Costs, Fees and Charges. Commissions, fees and expenses are covered in the "Fee and Commission Schedule for J.P. Morgan Self-Directed Investing Accounts," which is provided at account opening or, where applicable, are stated in applications, prospectuses, contracts and/or confirmation notices.

Compensation to Employees and Representatives. You may speak with a registered representative in connection with opening or maintaining an Account. The compensation of registered representatives located in a Chase bank branch on investment products generally reflects the commissions, fees and expenses paid on the products and services that the representatives sell (**Fees**). Fees vary by product or service, so such representatives may receive more for selling one product or service than another. In addition, employees of JPMorgan Chase Bank, N.A. may receive compensation in connection with referring customers to JPMS in accordance with applicable legal and regulatory requirements. This compensation, if any, is included in the standard fees paid and will not increase your fees. You should feel free to contact the client service center about compensation paid on investments.

V. Brokerage Services Versus Investment Advisory Services

Investment advisory and brokerage accounts are very different from each other. They are governed by different laws and regulations, have different ways to pay for our services, and have different obligation requirements for us, including the standard of care we owe you. It is very important you understand the differences between these accounts so you can select the type of accounts that are the most appropriate for you. We encourage you

INVESTMENT AND INSURANCE PRODUCTS ARE:

- NOT FDIC INSURED • NOT INSURED BY ANY FEDERAL GOVERNMENT AGENCY
- NOT A DEPOSIT OR OTHER OBLIGATION OF, OR GUARANTEED BY, JPMORGAN CHASE BANK, N.A. OR ANY OF ITS AFFILIATES
- SUBJECT TO INVESTMENT RISKS, INCLUDING POSSIBLE LOSS OF THE PRINCIPAL AMOUNT INVESTED

to carefully read the explanation of the differences in the materials provided to you (including the *Form CRS*) and to talk to your advisor if you have questions.

Important Things to Know About Your Account

- *No account monitoring.* JPMS is not obligated to monitor your account to ensure that your investment objectives are implemented or for any other reason.
- *No discretion.* Unless otherwise agreed to in writing, JPMS does not have any discretionary authority or obligation to review or to make recommendations for the investment of cash or securities in your account.
- *Survival of the Brokerage Account Agreement.* The brokerage account agreement here survives termination/closure of any advisory account.

VI. Mutual Fund Investing

A Guide to Mutual Fund Investing. Mutual funds can offer the benefits of diversification and professional management and can be an easy and efficient way to invest. As with all investments, mutual funds involve risk. Always read the prospectus or other investment materials carefully before you invest. If you have questions about mutual funds or any investment, please contact the phone number on the front of your account statement.

- *What is a mutual fund?* A mutual fund is a company that pools money from many investors and invests the money in stocks, bonds, and other securities or assets in some combination. The holdings of the mutual fund are its "portfolio." Each share of the mutual fund represents an investor's proportionate ownership of the mutual fund's portfolio and any income those holdings generate. The portfolios of mutual funds are managed by separate entities known as "investment advisors" that are registered with the U.S. Securities and Exchange Commission (**SEC**).
- *How do I purchase mutual funds?* You can purchase mutual fund shares for your Account online through chase.com or jpmorganonline.com or by calling the phone number on the front of your account statement. You can also purchase mutual fund shares directly from a mutual fund company as described in the fund company's prospectus or statement of additional information. The price paid for mutual fund shares is the mutual fund's net asset value (**NAV**) per share plus any shareholder fees that the mutual fund may impose at the time of purchase, such as sales loads. The NAV is calculated at the end of each business day by dividing the total value of the mutual fund's holdings (minus expenses) by the number of shares owned by the mutual fund's shareholders. Mutual funds are "redeemable," meaning that investors can sell their shares back to the mutual fund.
- *What is market timing?* Mutual funds are designed for long-term investors, not active traders who attempt to "time the market." Most mutual funds implement practices and procedures to protect shareholders from investors who are active traders and seek to practice a market-timing strategy. Market timing involves the rapid buying and selling of mutual fund shares in an attempt to realize short-term profits. This excessive trading of mutual fund shares may disrupt a fund's investment strategy. It may also negatively influence a mutual fund's performance results. Mutual funds use a variety of techniques to discourage investors from using mutual funds to practice market timing, including imposing redemption fees, implementing trading restrictions, and identifying and isolating market timers.

- *How do I learn more about mutual funds?* Details about a specific mutual fund can be found in the mutual fund's prospectus. Always read the prospectus or other investment materials carefully before investing. Additional details about these and other topics, including a description of different types of mutual funds, a detailed description of opportunities to receive discount pricing, an explanation of shareholder fees and possible tax consequences, sources of additional information and a glossary, are posted on chase.com or jpmorganonline.com and related websites.

Mutual Fund Share Classes Available to J.P. Morgan Self-Directed Investing Accounts. Different share classes provide you with choices for how to pay for your investment. Many mutual funds make more than one class of shares available to investors. Certain mutual fund share classes are subject to conditions and restrictions and may not be available for purchase by all investors. Each class will invest in the same investment portfolio of securities and will have the same investment objectives and policies. However, each class will have different sales charges and expenses. This multi-class structure allows investors to select a fee and expense structure that is appropriate for their individual investment goals.

J.P. Morgan Self-Directed Investing Accounts offer load-waived Class A shares and no-load shares (or a similar share class in the case of fund families that do not offer load-waived shares for self-directed investors). Institutional, retirement and certain other share classes of funds may be available through other JPMS and JPMCB accounts.

JPMS and/or its Affiliates Receive Payments from Mutual Fund Companies. In addition to sales loads, shareholder servicing fees and 12b-1 fees described in the prospectus, some mutual funds advisers, distributors or other entities make payments to JPMS and/or its affiliates based on the amount of the fund's shares sold by JPMS or owned by clients of JPMS. These payments are typically called "revenue sharing" and are paid from the entity's profits or revenues, not from the fund's assets.

JPMS receives compensation from mutual fund families or their affiliates for providing certain administrative, clearing and shareholder services. These payments are calculated either based on a percentage of the average dollar value of the fund assets held by JPMS in customer accounts or based on the number of mutual fund positions in the accounts. These fees may be paid entirely from fund assets or may be subsidized in whole or in part by the advisor, distributor or other affiliates of the fund through revenue sharing. Revenue sharing payments are negotiated separately with each fund family and not all fund families pay the same amount or pay according to the same formula. There is, therefore, a potential conflict of interest in the form of an additional financial incentive to JPMS for making available to customers mutual funds whose affiliates enter into revenue sharing arrangements.

In the case of J.P. Morgan Self-Directed Investing accounts, JPMS may receive payments of up to 0.40% per year of the average daily assets of fund shares carried in such accounts and/or a rate of up to \$20 per year per mutual fund position in such accounts, as applicable, for providing the services noted above.

JPMS also receives additional revenue sharing payments with respect to certain full-service brokerage and advisory accounts from affiliates of certain mutual funds, including mutual funds that may be available for purchase in J.P. Morgan Self-Directed Investing accounts. JPMS may also be reimbursed by or on behalf of mutual funds for expenses JPMS incurs for various meetings, seminars and conferences held in the normal course of business.

The prospectus and statement of additional information of mutual funds available through JPMS may contain additional information regarding revenue sharing payments made by affiliates of the fund companies.

Important Information About Money Market Mutual Funds

Money market funds fall into three general categories: Government, Retail and Institutional. During periods of market turmoil, when certain triggers are met and depending into which category they fall, money market funds could be subject to one or more of the following:

- **Redemption Gates:** Retail and Institutional money market funds may place temporary limits on your ability to redeem shares for up to 10 business days in a 90-day period. These redemption gates are designed to ensure orderly redemptions during extreme market stress. This means that if these extreme market conditions occur, you could be temporarily prevented from selling your money market fund shares.
- **Liquidity Fees:** Retail and Institutional money market funds may impose fees of up to 2% (depending on market conditions and the fund board's determination) on the redemption of money market fund shares. The liquidity fee would be held by the fund to help support liquidity levels by transferring the cost of redemption from the fund to redeeming shareholders. This means that while you could access your funds, it would cost you more. For example, if there was a 1% fee, in order to redeem \$1,000, you would be charged \$10 by the fund, so the total amount of the redemption would be \$1,010.
- **Floating Net Asset Value (NAV):** Institutional (but not Government or Retail) money market funds will be required to value their portfolio securities using current market prices, which means that your fund shares may be priced at more or less than \$1 when the value of the securities in the fund fluctuates.

What You Should Know

- Government money market funds, which invest at least 99.5% of their assets in cash, government securities and/or repurchase agreements collateralized with cash or government securities, will **NOT** be subject to a redemption gate, liquidity fee or floating NAV; however, a Government money market fund **MAY** reserve the ability to impose redemption gates and/or liquidity fees as long as the fund discloses this to you.
- Retail money market funds, the beneficial owners of which are limited to natural persons (e.g., individuals, but not corporations), will be subject to the possible imposition of a redemption gate and liquidity fee but **NOT** a floating NAV.
- Institutional money market funds, which are any funds that do not qualify as Government or Retail, **will** be subject to the possible imposition of a redemption gate and liquidity fee and **will** be subject to a floating NAV.
- Investors in Institutional money market funds may elect to receive immediate transaction confirmations in lieu of receiving transaction information on their monthly account statements. If you would like to receive such trade confirmations, please contact us.
- If you are a shareholder who is no longer permitted to own a Retail money market fund, your holdings will be involuntarily redeemed by the fund or "Chase Bank Redemption" will appear on your account statement.

You could lose money by investing in a money market fund. Although a money market fund seeks to preserve the value of your investment at \$1.00 per share, it cannot guarantee it will do so. An investment in a money market fund is not insured or guaranteed by the FDIC or any other government agency. A money market fund's sponsor has no legal obligation to provide financial support to the money market fund, and you should not expect that the sponsor will provide financial support to the money market fund at any time.

VII. Product-Specific Disclosures

Government Bonds and Bond Funds Are Not Guaranteed. Although payments of principal and interest on underlying U.S. Government securities are guaranteed to be paid to the mutual fund portfolio or investor, the market value of mutual fund shares or other investments will fluctuate. If you purchase a bond mutual fund, there is no maturity date as there is with individual bonds, and the value of your investment will fluctuate over time.

International Investments Involve Additional Risks. International investments, which are investments in businesses outside of the United States, involve additional risk because their income and principal are exposed to fluctuating currency exchange rates and uncertain political and economic conditions, in addition to normal market risks.

JPMorgan Chase Deposit Account. Unless you were offered and selected a different option when opening your Account, uninvested cash in your JPMS J.P. Morgan Self-Directed Investing account is automatically "swept" to a bank deposit account with JPMorgan Chase Bank, N.A. (the **Deposit Account**). Your Deposit Account balances are insured by the FDIC (subject to applicable limits) and are not protected by SIPC. Your Deposit Account balances will begin to accrue interest on the business day of receipt by Chase Bank up to but not including the day of withdrawal. Interest will be compounded monthly. Interest is computed on a 360-day basis according to the daily balance method. This method applies a daily periodic rate to the full amount of principal in the account each day. The interest rate paid on Deposit Account balances will vary based on business and economic conditions and is reset periodically at the discretion of Chase Bank. As the interest rate paid on Deposit Account balances may be higher or lower than the rate available to direct depositors of Chase Bank for comparable accounts (and the return on any other vehicles available to you as a sweep option), you should compare the terms, rate of return, required minimum amounts, charges and other features of the Deposit Account with those of other deposit accounts and alternative cash investments. You should note that the interest rates may be reduced in the event of an increase in FDIC insurance premiums paid by Chase Bank. Interest rates may also vary between different Deposit Accounts offered to different JPMS customers. For the current interest rate, please call us at the number on the front of your account statement or go to chase.com or jpmorganonline.com. Chase Bank is an affiliate of JPMS. Chase Bank, JPMS and their affiliates will benefit financially from the Deposit Account. You will receive more detailed information about the Deposit Account, including additional information about FDIC insurance, promptly after your first transaction in the Deposit Account. JPMS may change the products available as cash sweep options for J.P. Morgan Self-Directed Investing accounts.

Purchasing J.P. Morgan Funds. JPMS offers its clients a large number of mutual funds from a wide variety of mutual fund companies. JPMS is an affiliate of JPMorgan Chase & Co., one of the largest financial holding companies in the United States, which provides a wide range of financial services to various mutual fund companies through its subsidiaries and affiliates. Some of these

affiliates provide investment management and other services to J.P. Morgan Funds, for which those affiliates will benefit from that purchase as a result of receiving investment management and other fees. Therefore, because JPMS and its affiliates will in the aggregate receive more compensation if you purchase shares in a J.P. Morgan Fund than if you were to purchase shares in a non-affiliated mutual fund, there is a conflict of interest when JPMS clients purchase J.P. Morgan Funds. Additional information regarding revenue sharing, including the fund families that participate in these arrangements, can be found at chase.com or jpmorganonline.com or related websites.

Money Market Funds. If JPMS offers certain Money Market Mutual Funds as an additional sweep option for a Settlement Account (as defined in the Brokerage Account Agreement), please note the following. A money market fund is a type of mutual fund that is required by law to invest in low-risk securities. These funds have relatively low risks compared to other mutual funds and pay dividends that generally reflect short-term interest rates. Unlike the Deposit Account, money market funds are not insured or guaranteed by the FDIC or any other government agency. Money market funds typically invest in government securities, certificates of deposit, commercial paper of companies, or other highly liquid and low-risk securities. You could lose money by investing in a money market fund. For more information about money market funds, please refer to the section above entitled "Important Information About Money Market Mutual Funds."

Before selecting an available Money Market Mutual Fund sweep options for your Account, you should carefully read all of the fund's available information, including its prospectus. Money market funds are regulated primarily under the Investment Company Act of 1940 and the rules adopted under that Act, particularly Rule 2a-7. As disclosed in the Mutual Fund Investing section above, JPMS may benefit financially from your selection of one of the Money Market Fund sweep options. You will receive a prospectus and other related offering materials in connection with your first transaction in your Money Market Mutual Fund sweep account.

VIII. Inactive and Unclaimed Accounts

Each state has laws that govern when accounts are considered "abandoned" and when a customer's funds are required to be sent to the state. You are encouraged to make sure your accounts remain active so you can continue to receive regular statements, have the full use of your accounts, and avoid the potential of having your assets transferred to the state as "abandoned property."

BROKERAGE ACCOUNT AGREEMENT

1. Definitions

As used in this Agreement,

- a. "You," "your," "yours," "customer," "client," "participant" or "account holder" mean each person who signs the Application (as defined below in Section 2), each agent authorized by the account holder, and any trust with a trustee signing the Application on its behalf.
- b. "Account" means a self-directed brokerage account opened pursuant to this Agreement.
- c. "J.P. Morgan Securities LLC," or "JPMS," mean J.P. Morgan Securities LLC, its successor firms, direct or indirect subsidiaries, correspondents, affiliates and assigns.
- d. "Retirement Brokerage Account" means an account which is an individual retirement account, simplified employee pension plan or qualified retirement plan for which JPMS acts as Custodian.
- e. "Settlement Account" means the JPMorgan Chase Deposit Account or any other account linked to your Account or sweep option for the purpose of settling transactions that may be made available to you. The JPMorgan Chase Deposit Account shall each be referred to herein as the "Deposit Account."
- f. "Applicable Laws" mean any applicable constitutions, rules, regulations, customs and usages of the exchange or market and its clearinghouse where securities transactions are settled by JPMS, and all applicable laws, rules and regulations of governmental authorities and self-regulatory agencies including, but not limited to, the rules and regulations of the SEC, the Board of Governors of the Federal Reserve System, and FINRA.

2. Introduction

- a. This *Brokerage Account Agreement (Agreement)* contains the terms and conditions governing JPMS self-directed brokerage accounts. You have read this Agreement, and you will keep it for your records. By consenting to the J.P. Morgan Self-Directed Investing online application (**Application**), you are agreeing to all of the terms and conditions contained in the Application, the Agreement, any online agreements, any prospectuses provided to you, and any other documents (collectively, the **Account Documents**) provided to you related to any Accounts, as defined above, you now have or may in the future have with JPMS (each, an **Account**), and you are agreeing that the Account Documents are incorporated herein by reference. You agree that your Accounts are also subject to all applicable JPMS policies and procedures. You agree to these terms in consideration of JPMS opening one or more Accounts for you, and JPMS is agreeing to act as broker-dealer for you in the purchase or sale of securities or other property for your Account and on your instructions. This Agreement is binding upon and shall inure to the benefit of JPMS and its respective successors or assigns. You agree that this Agreement is binding upon you and your estate, heirs, executors, administrators, trustees, personal representatives, receivers, successors and assigns. You also understand and agree that any JPMS account(s) opened on your behalf with respect to which JPMS provides investment recommendations or advice is governed by a different agreement.
- b. The Account is a cash account that can be used to purchase or sell securities. If made available, a separate agreement is required to open a margin account.
- c. Neither JPMS nor its representatives offer tax, legal or accounting advice or services, and you will not solicit or rely upon any such advice from JPMS whether in connection with transactions in any of your Accounts or otherwise. You understand that you must consult your own legal, tax and accounting professionals to the extent you deem necessary.
- d. By submitting an Application, you authorize JPMS, in its sole discretion, to verify your identity, creditworthiness and other information. To obtain this information, JPMS may contact your employer, obtain consumer and credit reports, and make other inquiries in its discretion, but JPMS is not required to do so. Such inquiries may include information pertaining to all joint account holders and your spouse if you live in a community property state. You also authorize JPMS to make or obtain copies of your consumer and credit reports at its

discretion at any time for reasons including, but not limited to, the following: (i) to collect a debit balance in your Account; (ii) to investigate, detect and prevent fraud involving you or your Account; (iii) to help grant, extend or modify the terms and conditions of any credit you have applied for or received or which you have agreed to guaranty or secure; or (iv) if a deposit of funds or securities to your Account is returned, as well as such other reports as are otherwise required to enable JPMS to comply with Applicable Laws. JPMS may provide information about your Account and you to consumer and credit reporting or collection agencies. JPMS may deny your application to open an account or may decline to offer you certain services in its sole discretion for any reason. You may make a written request for a description of the nature and scope of the reports made or obtained by JPMS and the same will be provided to you within a reasonable period of time unless otherwise prohibited by Applicable Laws. You further agree to provide JPMS, on request, such additional information or certifications as may be required by JPMS or Applicable Laws.

e. **Important Information About Procedure for Opening a New Account.** Federal law, including the USA PATRIOT Act, requires all financial institutions to obtain, verify and record information that identifies each person who opens an account. This means:

- When you open a personal Account, JPMS will ask for your name, residential address, date of birth and Social Security number, which will allow JPMS to verify your identity.
- If given this option, when you open a business account, JPMS will ask for your business name, tax identification number and business address, which will allow JPMS to verify your business. Entities will be required to provide additional documents such as articles of incorporation, certificates of good standing, partnership agreements, trust documents, and other applicable records. JPMS may also ask for the name, residential address, date of birth and Social Security number of persons authorized to act on the Account, which will allow JPMS to verify the identity of such persons.
- If persons acting on your behalf, such as custodians, agents, trustees and other authorized signers, are permitted to open your Account or are added to your Account, JPMS will ask for each such person's name, residential address, date of birth and Social Security number, which will allow JPMS to verify such person's identity. Until you provide the required information or documents, JPMS will not be able to open or maintain an Account or effect any transaction for you. If JPMS is not able to verify your identity, JPMS may not open an Account for you, and JPMS is authorized to take any action permitted by law.

You acknowledge and agree that JPMS will take steps that it deems necessary and reasonable in its sole discretion to verify the authenticity of customer identities in connection with instructions provided by you.

f. You agree that if you receive advice or recommendations from a financial advisor of JPMS or any of its affiliates, any such recommendations or advice will not be relied upon or used by you with respect to your Account(s). You further agree that any advice provided with respect to any account that is enrolled in an investment advisory program offered by JPMS or its affiliates is intended only for such account and should

not be relied upon or used by you with respect to any other account, including your Account. You understand that neither JPMS nor its affiliates (or their respective representatives) are permitted to provide investment advice or investment recommendations or offer any opinion regarding the suitability of any security, order, transaction or strategy for your Account, and no research opinion nor any security on any list or any information provided to you by JPMS or its affiliated or their respective representatives, either on a JPMS website or by mail or any other means, constitutes a recommendation to you to purchase, hold or sell any investment for your Account.

- g. Transactions executed through your Account, whether based on information obtained from JPMS or elsewhere, will be solely your own decision and based on your own evaluation of your personal financial situation, needs, risk tolerance and investment objective(s). **Any suitability information, including, but not limited to, information concerning your investment objectives, liquidity needs and tolerance for risk, collected for your account(s) or related to your account(s) before such account(s) become subject to these term of service will not be considered by JPMS nor any JPMS representative when you make investments in your Account.** Further, you understand and agree that you are solely responsible for knowing the rights and terms of all securities in your Account, specifically including valuable rights that expire unless the holder takes action. This includes, but is not limited to, warrants, stock rights, convertible securities, bonds, and securities subject to a tender or exchange offer. You understand and agree that neither JPMS nor its representatives have any obligation to notify you of any upcoming expiration or redemption dates, or, except as required by applicable law or regulation, to take any action on your behalf without specific instructions from you.
- h. You understand that: (i) the client service center may take orders to sell or redeem certain securities that are not available for purchase through a J.P. Morgan Self-Directed Investing account, subject to JPMS' procedures with respect to such investments; (ii) Accounts are not designed for investors who trade in low-priced securities, engage in day trading or enter special orders, including, but not limited to, block and algorithmic trades; (iii) JPMS maintains order entry policies for low-priced securities and other trading rules, which will be subject to change from time to time; (iv) JPMS reserves the right to place restrictions on your Account in its sole discretion and to cancel or not take any order that it believes would violate Applicable Laws; and (v) JPMS will have no responsibility or liability for failing to cancel any order. You agree to accept full responsibility for the monitoring of your Account with respect to all transactions entered. You agree that neither unsecured email, any online secure message, nor any other electronic communication that is not designated by JPMS for use with your Account(s) (including, but not limited to, mail, personal email, fax or voicemail message) are to be used to request, authorize or effect the purchase or sale of any securities or other investments, to send funds transfer instructions, or for any other financial transactions that require real-time communication or more formal written authorization in accordance with Applicable Laws or JPMS policies and procedures. Any such requests, orders or instructions that you send in contravention of the foregoing agreement will not be accepted and will not be processed by JPMS. JPMS will not be responsible for any loss, damage, claim or cause of action that could result from you supplying JPMS with personal information via email or your requests, orders or instructions not being accepted or processed.

3. Communications

- a. JPMS shall send all communications to you, pursuant to the "Electronic Services" section of the Agreement (including, but not limited to, by electronic delivery and site email), by first class mail (postage paid) or by fax, electronic mail or express delivery service at your address of record as shown on the records of JPMS and will be deemed to have been personally delivered to you whether actually received or not. Notices and other communications may also be provided to you verbally. You shall send all communications to JPMS by any means JPMS makes available to you, including, but not limited to, site email or by first class mail, postage paid, to the respective current mailing address as communicated to you from time to time or as otherwise directed by JPMS. You authorize JPMS to accept electronic or facsimile copies of this or any other document or instruction as if it were the original and to accept signatures on facsimiles as if they were originals unless electronic signatures are made available. You understand that you may not place any order for the purchase or sale of any security by mail, email, facsimile transmission or voicemail message and that JPMS will not honor or act upon such attempted orders.
- b. Transactions in your Account will be confirmed to you in writing or by email when required by Applicable Law or regulation, and JPMS will provide you with periodic statements reflecting any activity in your Account. If you have placed a trade that for any reason is rejected or is not executed, JPMS is not required to issue a confirmation stating the trade was not executed (no negative confirmations).
- c. If you suspect an error on a periodic statement or trade confirmation, or if you have not received a confirmation within 5 business days of placing an order with JPMS, you must promptly contact JPMS at the number on the front of your account statement or such other phone number or electronic means as JPMS may advise from time to time. It is your responsibility to review your statements and confirmations carefully and to request clarification on any account items not clearly understood. Statements and confirmations provided to you will be considered correct and will be binding upon you unless errors or suspected errors are reported to JPMS within 10 business days from the receipt of the statement and within 2 business days of receipt of a confirmation. In all cases, JPMS reserves the right to challenge you or your objections.
- d. You consent to the electronic recording and monitoring of any and all communication with JPMS, including phone, electronic mail, internet executed activities and other communication initiatives.
- e. For the mutual protection of JPMS and you, JPMS may record any phone conversations with you without further notice. Those recordings may be submitted as evidence to any arbitration or in any proceeding to establish any matters related to this Agreement. Upon receipt of any instructions or inquiries by phone or in writing (including facsimiles and electronic mail) from you, or from any person claiming to be you, JPMS is authorized, without notifying you, to carry out the instructions or to respond to the inquiries. You agree to hold JPMS harmless from any claim or expense arising in connection with your instructions or requests to JPMS concerning the Account.
- f. You agree that JPMS shall not be under a duty to inquire as to the authority or propriety of any instructions given to JPMS by you, your authorized agent or anyone using your password or

user ID, and JPMS shall be entitled to act upon any such instructions, and JPMS will not be liable for any loss, cost, expense or other liability arising out of any such instructions.

- g. You may request, and JPMS, in its sole discretion may agree, that JPMS send notices and confirmations relating to your Account to a PO Box or third-party address. In consideration of JPMS recognizing such request to send notices and confirmations relating to your Account to a PO Box or third-party address, you agree that all correspondence and notices of any kind sent by ordinary mail to such address shall have the same force and effect as if delivered to you personally.

4. Account Transactions; Settlement; Payment and Delivery

- a. All orders for the purchase or sale of any securities or property in your Account are executed with the express understanding that you intend to make an actual purchase or sale and that you intend and agree to deliver securities to cover your sales prior to settlement date. By placing a sell order in your Account, you represent that you own the security with respect to which the sell order has been placed, that such security may be sold without restriction in the open market, and that if JPMS does not have the security in its possession at the time you place the sell order, you shall deliver the security by settlement date in good deliverable form. In the event of a short sale of any securities, or if you fail to deliver any property JPMS has sold at your direction by settlement date, you authorize JPMS, in its discretion, to buy in such securities or other property necessary to make delivery thereof, and you hereby agree to be responsible to JPMS for any losses and expenses which JPMS may incur or sustain as a result of your failure to make delivery on a timely basis or any premiums which JPMS may be required to pay as a result of its buy-in of such securities or other property sold.
- b. You understand that JPMS generally requires that stock certificates be in the Account and in good deliverable form prior to the acceptance of a sell order. You are aware that any order inadvertently accepted without negotiable certificates in the Account will be subject, at the discretion of JPMS, to cancellation or buy-in. All sell orders (except short sales) will be for securities that you own at the time the order is placed and must be in good deliverable form in your Account on or before settlement date of the transaction. You understand that proceeds from a sale cannot be paid to you until the certificate(s) have been received by JPMS in good deliverable form. If the certificate(s) are not received on or before settlement date, or as market conditions warrant, the securities may be purchased on the open market by JPMS in accordance with the requirements of Regulation T of the Federal Reserve Board or JPMS policy. If the securities are bought in, you will be responsible for any resulting losses and all associated costs incurred by JPMS.
- c. You agree to pay for all purchases of securities or property in your Account on or before the settlement date regardless of any right of equity, set-off or counterclaim you may have or allegedly have against JPMS. JPMS may, at its discretion, place a restriction on funds in your Settlement Account on trade date to cover any amounts owed, which you understand will prevent you from accessing these amounts in the period between trade date and settlement date. If you do not pay JPMS in full for any such purchases for your Account, JPMS is authorized to: (i) pledge, repledge, hypothecate, re-hypothecate or loan to JPMS as broker or to others, without notice, any and all securities and other property (except, in

the case of a cash account, fully paid for securities), which JPMS may hold for you (either individually, jointly or in the name of another person or entity), separately or in common with other securities and other property, for the amount then due or for a greater or lesser amount, and, without retaining in its possession and control for delivery, a like amount of similar securities or other property until payment is made in full; and (ii) to sell any and all securities and other property that JPMS may hold for you (either individually, jointly or in the name of another person) and to keep any profit realized of the sale of such securities; and (iii) cancel any or all outstanding orders for your Account. You agree to reimburse JPMS for any costs, losses, fees or expenses incurred.

- d. *Settlement Accounts:* You understand the Deposit Account will be used as your Settlement Account. You authorize JPMS to invest or "sweep" available credit balances in your Account(s) into your Settlement Account subject to JPMS' then-applicable policies, procedures, disclosures, offering documents and prospectuses, including, but not limited to, the Deposit Account disclosure, contained in *Disclosures and Brokerage Account Agreement* and in the disclosure you will receive in connection with your first deposit in the Deposit Account, which may be amended from time to time. At the discretion of JPMS, you may be given additional cash sweep options, and you acknowledge that JPMS may change the available sweep option(s) or offer different options for different customers (such as customers establishing Accounts with assets from another JPMS account). If a linked Chase Bank checking account is offered as a Settlement Account, you authorize JPMS to initiate debits and credits to your JPMS and Chase Bank accounts. In addition, you authorize Chase Bank to follow the instructions of JPMS. You agree to indemnify JPMS and Chase Bank from any claims stemming from the execution of your instructions, and you agree to indemnify Chase Bank (or affiliates) from any claims stemming from requests made by JPMS with respect to your Account. If a money market fund sweep option is made available, you understand JPMS will pay for securities purchases by liquidating money market mutual fund shares held in your Account, and you authorize JPMS to liquidate the number of shares required to cover cost of any securities purchases.
- e. *Deposits on Transactions:* JPMS may require you to deposit cash or other property, acceptable to JPMS to satisfy any obligations, in your Account(s) in such amounts as JPMS determines in its sole discretion, and you agree to comply with any such request by the deadline set by JPMS.
- f. *Payment for Purchases:* Unless you have chosen not to have a Settlement Account (or you were offered and elected a different Settlement Account), your transactions will settle against balances in the Deposit Account. If a linked Chase Bank checking account is made available, you understand that, on settlement date, JPMS may debit your bank account for payment of the securities purchased. You agree to maintain sufficient funds in your Chase Bank account to cover all payments to JPMS, and you agree that this debit to your bank account will not draw on any overdraft credit line or other credit feature.
- Purchasing securities with credit is prohibited on JPMS accounts except through a margin account agreement. You can also provide good funds sufficient to fully cover the purchases before the close of business on settlement date.
- g. *Free Credit Balances:* If JPMS permits your account type to have no Settlement Account, and you choose to have no Settlement Account, or in the unlikely event a sweep does not

occur for any reason, you authorize JPMS to use any free credit balance in any of your Accounts in accordance with all Applicable Laws and to pay interest at such rates and under such conditions as are established from time to time by JPMS for such Account(s) and for the amounts of cash so used. In accordance with applicable regulations, free credit balances are carried in customers' Accounts pending, and with a view toward, reinvestment. JPMS may determine not to pay interest on free credit balances (i) representing either uncollected funds (i.e., any deposited non-cash items [e.g., checks] for which JPMS has not yet received credit) or funds that are deposited and subsequently withdrawn prior to the expiration of the minimum time period required by JPMS, or (ii) where prohibited by Applicable Laws.

- h. *Credit for Sales and Other Transactions:* Proceeds from the sale of securities held in a JPMS account are typically posted on settlement date. These funds will be credited to your Settlement Account. The availability of funds depends on many factors, and JPMS may withhold access to credited funds and checks until items have cleared and good funds have been confirmed as available. Because the availability of funds may fluctuate on a daily basis, JPMS will not be liable to you for any consequences of insufficient funds. If you request JPMS to place a stop payment on a check issued to you or pursuant to your request, JPMS may refuse. If a stop order is placed on the check, JPMS may (i) first require an indemnification from you; (ii) wait at least 10 business days before reissuing the check; and (iii) recredit to your Account funds in the amount of the check, but such funds shall not be available for any purpose, including withdrawal or to pay for the purchase of securities, until debited from your Account upon reissuing of the check.

Important Notice Regarding Checks Issued from Your Brokerage Account: To request that JPMS stop payment on a lost, stolen or damaged check that JPMS has issued from your brokerage account, JPMS will require a signed Declaration and Indemnity document. JPMS will wait at least 10 business days before issuing a new check. The assets will be immediately credited back to your brokerage account and will be frozen until the 11th business day when JPMS can reissue the check if a new check is requested by you. If you have any questions, contact the number on the front of your account statement.

- i. *Satisfaction of Liabilities:* You shall at all times be liable for the payment upon demand of any debit balance or other obligations and any and all reasonable costs, fees, expenses, liabilities and damages (collectively, **Costs**) incurred by JPMS in connection with any of your Accounts with JPMS, and you shall be liable to JPMS for any deficiency remaining in any such Accounts in the event of the liquidation thereof, in whole or in part, whether liquidated by JPMS or by you, and you shall pay such Costs upon demand. For the avoidance of doubt, Costs include, but are not limited to, (i) JPMS enforcing its rights under this Agreement; (ii) any investigation, litigation or proceeding involving your Account(s); (iii) the use of or access to the Electronic and/or Extra Services (as defined in Section 29 below) by you or any person authorized to act on your behalf, including the failure by you or any person authorized to act on your behalf to comply with any terms, conditions or limitations applicable to such Electronic and/or Extra Services; (iv) any breach or failure by you to perform any provision of this Agreement or any other agreement between you and JPMS; or (v) JPMS, in general, acting in reliance upon your instructions or the instructions of JPMS or the instructions of any other person authorized to act on your behalf. You agree to promptly and fully repay any

debt owed or pay any fee due to JPMS upon request. You understand that if you fail to repay the debt owed or pay any fee due after the request is given, whether or not there is a dispute, JPMS may take one or more of the following actions: (i) close your Account, (ii) liquidate assets chosen in JPMS' sole discretion held in the Account, (iii) cancel outstanding orders in whole or in part, or (iv) take any action that JPMS in its sole discretion deems appropriate to cover the debt or fee owed or in dispute or to otherwise protect JPMS. You are responsible for reimbursing JPMS for expenses incurred in the collection of the debt or fee owed.

- j. *Right of Set-Off, Security Interest and Lien:* As an added security measure for any debt or fee owed, you grant JPMS a lien on and a valid and first priority, perfected, continuing security interest and right of set-off in all securities, money deposits or property belong to you or in which you have an interest which JPMS or any JPMorgan Chase & Co. affiliate carries or has possession of for any purpose including safekeeping. In addition, you grant this same right of set-off to any JPMorgan Chase & Co. affiliate relative to securities or money deposited with JPMS. If the debt or fee is due or overdue, JPMS may use the funds in any of your accounts (including joint ones) to pay the debt, in part or in full.
- k. *Verification of Identities:* You acknowledge and agree that JPMS will take steps that it deems necessary and reasonable in its sole discretion to verify the authenticity of customer identities in connection with instructions by you regarding wire transfers or any other instructions provided by you.

5. Certain Securities Transaction Practices

- a. Certain securities services and products offered by JPMS may not be available to you unless you satisfy certain conditions, such as minimum purchase amounts, or may not be made available to this Account. You will not buy or sell any securities of a corporation of which you are an affiliate, or sell any restricted securities, except in compliance with Applicable Laws and regulations and with notice to JPMS if the securities are restricted. Pursuant to Rule 14b-1 under the Securities Exchange Act of 1934, as amended, unless JPMS receives your written objection, JPMS may release your name, address and securities positions on request to companies whose securities you own.
- b. You understand that, subject to its obligations to provide best execution, JPMS transmits your orders for execution to various exchanges or market centers based on a number of factors. These include: size of order, trading characteristics of the security, favorable execution prices (including the opportunity for price improvement), access to reliable market data, availability of efficient automated transaction processing, and reduced execution costs through price concessions from the market centers. Certain of the market centers may execute orders at prices superior to the publicly quoted market in accordance with their rules or practices. While you may specify that an order be directed to a particular market center for execution, the order routing policies, taking into consideration all of the factors listed above, are designed to result in favorable transaction processing for the customers of JPMS. *(Please be aware that orders placed through any automatic phone trading service or electronic or online trading systems cannot specify a particular market center for execution.)*
- c. JPMS may pay from time to time for certain order flow in the form of discounts, rebates, reductions of fees or credits. As a result of sending orders to certain trading centers, JPMS

receives payment for order flow in the form of discounts, rebates, reductions of fees or credits. Under some circumstances, the amount of such remuneration may exceed the amount that JPMS is charged by such trading centers. This does not alter JPMS' policy to route customer orders to the trading center where it believes clients will receive the best execution, taking into account price, reliability, market depth, quality of service, speed and efficiency.

In addition, JPMS may effect trades on behalf of your Account through exchanges, electronic communications networks, alternative trading systems, and similar execution systems and trading venues (collectively, **Trading Systems**), including Trading Systems in which JPMS or its affiliates may have a direct or indirect ownership interest. JPMS may receive indirect proportionate compensation based on its ownership percentage in relation to the transaction fees charged by such Trading Systems in which it has an ownership interest. Contact the service center to request an up-to-date list of all Trading Systems through which JPMS might trade. Such Trading Systems (and the extent of JPMS ownership interest in any Trading System) may change from time to time.

- d. *Fast Market:* During periods of heavy trading and/or wide price fluctuations (**Fast Market**), there may be delays in executing your order or providing trade status reports to you. In addition, if you place a market order in a Fast Market, there may be a significant difference in the quote you receive prior to or at the time you place the order and the execution price you receive.

When trading using the services described in the "Electronic and/or Extra Services" section in a Fast Market, you agree to accept full responsibility for that order. If JPMS believes any particular stock is or may be volatile, JPMS may, but is not obligated to, decline to allow you and other clients to place orders for that stock through the Electronic Services. In addition, if made available, JPMS reserves the right, but is not obligated, to prevent any IPO stock from being traded through the Electronic Services. In either of these situations, you or your financial advisor may be required to contact a JPMS representative to assist you with transactions in these stocks. JPMS is not liable to you for any losses, lost opportunities or increased commissions that may result from you being unable to place orders for these stocks through the Electronic Services.

- e. With certain products or types of accounts, JPMS or its agents may produce performance reports. You understand that in producing such performance reports, JPMS and its agents will use reasonable care in compiling such reports and information from sources considered reliable. You agree that neither JPMS nor its agents shall be responsible for any errors or inaccuracies in such performance reports or for any lack of timeliness of such reports. You recognize that past performance is not a guarantee of future results.
- f. JPMS may refuse to execute an order or cancel an order if such funds are unavailable or if you have initiated a transaction that requires an addition of funds to your Account.
- g. *Fractional Shares:* JPMS may facilitate the trading of a fraction of a share of a security (**Fractional Share**) and subsequently hold Fractional Shares in custody in your Account. Fractional Shares present unique risks and have certain limitations. Fractional Shares may have different rights from full share interests of the same security, which can include:

- *Illiquidity.* JPMS does not guarantee that there will be a market for Fractional Shares of a particular security.
- *Price Improvement.* The Fractional Share component of certain orders may not be eligible for price improvement, which occurs when an order is executed at a price more favorable than the displayed national best bid or offer.
- *Transfer or Certification.* Fractional Share positions cannot be transferred or certificated. If you want to transfer your Account or specific share positions to another broker, or to close the Account, you authorize the liquidation of your Fractional Shares at prevailing market prices if they cannot be transferred or reorganized. The proceeds from your Fractional Share liquidation will be credited to your Account. Since your Fractional Shares cannot be transferred, your overall SIPC coverage may be affected.
- *Dividends.* If your Fractional Shares pay a dividend, the dividend payable to your Fractional Share position must be greater than or equal to one half of one cent to be credited to your Account, and it will be paid in proportion to your ownership interest.
- *Ownership Rights.* Fractional Shares may be eligible to participate in mandatory corporate actions such as stock splits, mergers or spin-offs. Fractional Shares may not come with the voting rights that whole shares entitle owners to vote on regarding matters affecting the company that issued the security. The foregoing notwithstanding, these situations are in all cases subject to the terms contained in the materials prepared by the issuer describing the corporate action, as well as JPMS' applicable policies and procedures, which may result in a different outcome from what is described herein.
- *Fractional Shares Trading.* JPMS may, at its discretion, offer the ability to purchase and sell certain securities in fractional share quantities (**Fractional Shares Trading**). Dollar-based orders will be converted into share quantities for execution, which may give the client interest in fractional shares of securities, which JPMS calculates to five decimal places. You understand that JPMS will not accept Fractional Shares Trading orders for the purchase or sale of a security in an amount less than \$5.00. You further understand that JPMS will only accept market orders for Fractional Shares Trading orders.

JPMS will generally execute Fractional Shares Trading orders for whole shares (or the whole share portion of an order with a fractional component) in an agency capacity. For those Fractional Shares Trading orders that include a fractional share component, JPMS will act as a counterparty and will execute that portion of the trade as principal or riskless principal. When trading as principal for its own account, JPMS may make a profit or incur a loss on each trade.

You understand that a Fractional Shares Trading order is an order to purchase or sell shares that have a notional value of approximately the dollar value specified by the order and that, if the order is executed, the notional value of the purchased or sold shares may vary from the dollar value specified by the order. Additionally, JPMS may be required to correct or adjust trades that (for a variety of reasons) have been executed in amounts that either exceed or fall short of the amounts requested. These trade corrections and adjustments could arise in

connection with either or both of the agency and principal components of the executed Fractional Shares Trading orders. Regardless, these trade corrections and adjustments will be executed in a principal capacity, and when trading as principal for its own account, JPMS may make a profit or incur a loss on each trade.

All Fractional Shares Trading orders will be marked "Not Held," which gives JPMS time and price discretion to execute the order without being held to the security's current quote. You understand that each time you submit an order to buy or sell a fractional share quantity or dollar-based amount of a particular security, you authorize JPMS to "work the order" and you understand that if you do not wish for orders to be handed on a Not Held basis, you should not engage in Fractional Shares Trading.

You understand that JPMS is under no obligation to offer Fractional Shares Trading in any security and may modify the list of eligible securities at any time without notice to you. Any modification to the list of Fractional Shares Trading eligible securities will not affect any fractional share interests previously acquired in your Account.

- h. *Automatic Re-investment:* JPMS provides you with the ability to enroll in a program to re-invest any and all dividend, capital gains and return of capital distributions (collectively, **Distributions**) for securities eligible for participation (the **Program**). By participating in the Program, all Distributions paid on eligible accounts or individual securities you have selected will automatically be reinvested into the shares of the same security. The important terms of the Program include:
 - *Voluntary Participation.* Participation in the Program is voluntary and you may modify or discontinue your participation at any time. You may enroll by specifying individual securities or have all eligible securities in your Account participate in the Program; modify your elections; or unenroll from the Program through the website or by contacting the client service center.
 - *Trade Execution.* With the exception of open ended mutual funds, provided you are enrolled in the Program prior to the record date, JPMS reinvests the Distributions from an eligible security on the pay date of the Distribution, at an average weighted price. For certain securities, reinvestment may occur through the Depository Trust Company (**DTC**), which may be later than the pay date. There may be a difference in price depending on the whether the Program trade is made through JPMS or DTC. These transactions will post to your Account when the shares are made available to JPMS by DTC and will be reflected on your statement.
 - *No Fees.* No commissions or fees are charged for Program trades.
 - *Fractional Shares.* JPMS will credit to your Account the number of shares equal to the amount of your funds to be reinvested in a particular security divided by the purchase price per share. If made available for your Account, participation in the Program may give you interests in fractional shares of securities, which JPMS calculates to 5 decimal places. You will receive dividend payments proportionate to your partial share holdings.
 - *Confirmation of Transactions.* All Program trades will be reflected on monthly account statements. You will not

receive separate immediate confirmations for Program trades. You may request the details of any Program trade by contacting JPMS. Transactions that are not part of the Program will continue to receive confirmations contemporaneously with the trade.

- *No Recommendation.* The inclusion of any security in the Program is not a recommendation by JPMS to buy, hold or sell such security. Participation in the Program does not assure profits on your investments and does not protect against loss in declining markets.
 - *Eligibility.* Generally, all brokerage accounts are eligible for participation as are most equities, open ended mutual funds, closed end funds and ETFs. Any exclusions will be identified at the time you are enrolled.
 - *Program Changes.* Program participants will be notified in advance if there are any material changes to the Program though no notice may be given if there are changes to the eligibility of any particular security.
- i. *Worthless Securities:* JPMS reserves the right to remove from your Account any security that is deemed to be worthless or to have been cancelled or otherwise invalidated. In determining that such a security is worthless or has been cancelled or invalidated, you agree that JPMS has derived information on such securities from third parties and that JPMS is not responsible for the accuracy or reliability of any information regarding such securities. JPMS will notify you if JPMS has removed a worthless, cancelled or otherwise invalidated security from your Account. Unless you provide JPMS with evidence of the validity of the security within 60 calendar days of the notice of removal, you agree to waive any claim to any future distribution from the security and agree to indemnify and hold JPMS harmless from any claims, liability or damages resulting from the removal of such security. If you provide JPMS with evidence of the validity of the security from an independent third party within 60 calendar days of receiving the notice of removal, JPMS will reinstate your position.
- j. *Trading Systems:* You understand and acknowledge that JPMS may effect trades on behalf of your Account through Trading Systems, including Trading Systems in which JPMS or its affiliates may have a direct or indirect ownership interest. JPMS or its affiliates may receive indirect proportionate compensation based on its ownership percentage in relation to the transaction fees charged by such Trading Systems in which it has an ownership interest. Currently, JPMS and/or its affiliates have an ownership interest in certain Trading Systems, including: (i) BATS Global Markets, (ii) BIDS Trading, (iii) Chicago Stock Exchange, (iv) Boston Options Exchange, and (v) Luminex Trading & Analytics LLC. You authorize JPMS to effect trades on behalf of the Account through all such Trading Systems, affiliated and unaffiliated, and all such other Trading Systems through which JPMS may determine to trade in the future. An up-to-date list of all Trading Systems in which JPMS or its affiliates have a direct or indirect ownership interest and through which JPMS might trade can be found at jpmorgan.com/TradingSystems. Such Trading Systems (and the extent of JPMS' or its affiliates' ownership interest in any Trading System) may change from time to time. You acknowledge that this disclosure relating to Trading Systems and your signature below shall constitute the requisite authorization and notice of JPMS' intent to trade through all such Trading Systems, pursuant to Section 408(b)(16) of ERISA and/or Section 4975(d)(19) of the Code.

6. Fees and Charges

- a. You understand and agree to pay certain fees (which are subject to change without notice to you) that will be charges for the services provided by JPMS under the Account Documents. Without limiting the generality of the foregoing, JPMS may charge your Account with such usual and customary charges as JPMS may determine to cover its services, including, but not limited to, transaction fees and commissions. You will promptly pay JPMS any deficiency that might arise in your Account(s). You agree that JPMS may charge a late payment charge if funds are not received by settlement date to cover the purchases in your Account. You acknowledge that JPMS does not, as a matter of policy, advance funds to its customers, but on rare occasions and in special circumstances, JPMS, in its sole discretion, may make some or all the anticipated proceeds from a sale of assets available to you before good funds are available to JPMS from the sale of those assets, and JPMS may in these circumstances charge you a prepayment fee. Both the late payment charge and the prepayment charge will be computed against the amount of the payment utilizing the late payment/cash due interest as provided in the *Fee Schedule*. You may be charged service fees as indicated in the *Fee Schedule*, available at chase.com/online-investing-pricing. You understand that JPMS may change its standard brokerage fees and charges from time to time, and you agree to be bound by such changes.

No-load mutual funds may be purchased directly from a mutual fund company without intervention of a broker and without payment of a service fee.

- b. You will be responsible for and pay any taxes, duties and fees applicable to activities in your Account(s). All service fees, charges, expenses, disbursements and taxes as described above may be deducted from your Account(s). Amounts owed to JPMS shall not be affected by any taxes, duties or other amounts you may owe to any third party. You understand that if you haven't paid what you owe JPMS, then without notice JPMS may: (i) sell any and all securities and other property which it holds for you (either individually, jointly or in the name of another person); (ii) shut off automated dividend reinvestment; or (iii) take any action that JPMS in its sole discretion deems appropriate to cover the debt owed or in dispute or to otherwise protect JPMS.
- c. *Additional Revenue:* You understand and acknowledge that JPMS or its affiliates may retain, as compensation for the performance of services, an account's proportionate share of any interest earned on aggregate cash balances held by JPMS or its affiliates with respect to "assets awaiting investment or other processing." This amount, known as "float," is earned by JPMS or its affiliates through investment in a number of short-term investment products and strategies, including, without limitation, loans to customers and investment securities, with the amount of such earnings retained by JPMS or its affiliates, due to the short-term nature of the investments, being generally at the prevailing Federal Funds interest rate (a publicly available average rate of all Federal Funds transactions entered into by traders in the Federal Funds market on a given date), less FDIC insurance and other associated costs, if any. "Assets awaiting investment or other processing" for these purposes include, to the extent applicable, new deposits to the account, including interest and dividends, as well as any uninvested assets held in the account caused by an instruction to purchase and sell securities. JPMS or its affiliates will generally earn float until such time as such

funds may be automatically swept into a "sweep" option, as described herein, or otherwise reinvested. "Assets awaiting investment or other processing" may also arise when JPMS facilitates a distribution from the account. Thus, pursuant to standard processes for check disbursement, cash is generally debited from the account on the date on the face of the check (also called the payable date). Such cash is deposited in a non-interest-bearing omnibus deposit account held by JPMS or its affiliates, where it remains until the earlier of the date the check is presented for payment or the date payment on the check is stopped at your instruction (in which case the underlying funds are returned to the account). JPMS or its affiliates derive float from their use of funds that may be held in this manner, as described above.

7. Account Termination and Restriction

- a. The provisions of this Agreement and the other Account Documents shall be continuous, shall cover individually and collectively all Accounts which you may open with JPMS, and shall inure to the benefit of JPMS and any successors or assigns.
- b. You understand that you may terminate or close your Account at any time by giving instructions to JPMS. You agree that you will remain fully responsible for any outstanding obligations and/or any charges to your Account for any reason whatsoever, whether arising before or after termination.
- c. JPMS has the right to terminate any of your Accounts (including multiple account holder accounts) at any time and for any reason, upon notice to you. JPMS has the right to terminate or restrict the service contemplated hereunder at any time upon notice to you. The provisions of this Agreement and the Account Documents shall survive the termination and/or closure of your Accounts insofar as they relate to your obligations in your Accounts, or actions or failures to take action in your Accounts, prior to termination of this Agreement or closure of your Accounts. JPMS reserves the right to terminate your Account if your address of record becomes a non-U.S. address.
- d. When your Account is closed or this Agreement is terminated, you agree that you will be responsible for giving JPMS instructions for how to dispose of the assets held in your Account. You agree that you will be responsible for any transaction costs, including commissions, associated with your instructions.
- e. You understand that JPMS may (whenever JPMS considers itself to be at risk for any reason with respect to your Account) freeze your Account in whole or in part, or close out any commitment made on your behalf, reject any trade, prohibit or restrict trading of securities or substitution of securities in your Account, or cancel any outstanding orders, all in JPMS' sole discretion and without notice to you, and you shall nevertheless remain liable for all your obligations to JPMS under this Agreement or otherwise.
- f. Whenever JPMS in its sole discretion considers it necessary for its protection, or in the event that you die or am judicially declared incompetent, or a petition in bankruptcy or for the appointment of a receiver for the benefit of creditors is filed by or against you, or an attachment is levied against your Account, or the collateral deposited to protect your Account is determined by JPMS in its sole discretion to be inadequate to properly secure the Account, then in any such case, JPMS is authorized to close your Account in whole or in part and in connection therewith JPMS may sell any or all of the securities

or property which may be in its possession, or which it may be carrying for you, or it may buy in any securities or property to cover short sales, or cancel outstanding orders, in order to close the Account.

- g. JPMS does not condone frequent or excessive trading, including of mutual fund shares, and monitors its accounts to detect such activity. JPMS reserves the right, in its sole discretion, to restrict or terminate accounts in which frequent or excessive mutual fund trading occurs.

8. Notice of Death

Any order given to JPMS by you, or your authorized agent, shall be binding upon you and your representative until JPMS has actual notice of your death, and such notice shall not in any way affect JPMS' right under this Agreement to take any action which it could have taken if you had not died. Upon receiving notice of your death (or, in the case of a multiple party account, the death of any account holder), JPMS may, at its sole discretion, suspend or restrict transactions in the Account and take such actions and require such papers, inheritance or estate tax waivers or other documents as it deems advisable to protect JPMS against any tax, liability, penalty or loss. Your estate shall be liable to JPMS for any debit balance or loss in the Account.

9. Release; Limitation of Liability

YOU AGREE TO RELEASE AND FOREVER DISCHARGE JPMS AND ITS SUCCESSORS AND ASSIGNS, AND ITS RESPECTIVE OFFICERS, DIRECTORS, AGENTS, AFFILIATES AND EMPLOYEES (COLLECTIVELY, THE **RELEASED PARTIES**) FROM ALL RESPONSIBILITIES, LIABILITIES, OBLIGATIONS, CLAIMS, DAMAGES, LOSSES AND EXPENSES OF ANY NATURE WHATSOEVER INCURRED OR SUSTAINED BY YOU AND CAUSED DIRECTLY OR INDIRECTLY BY ONE OR MORE OF THE RELEASED PARTIES FOLLOWING INSTRUCTIONS BY YOU OR ANY OTHER PERSON ACTING ON YOUR BEHALF OR BY SUSPENSION OF TRADING; WAR; NATURAL DISASTERS; GOVERNMENT RESTRICTIONS; TRADING HALTS; STRIKES; LABOR OR MATERIAL SHORTAGES; INTERRUPTIONS OF COMMUNICATIONS OR DATA PROCESSING SERVICES; EXCHANGE OR MARKET RULINGS; EXTRAORDINARY MARKET VOLATILITY; TRADING VOLUMES OR OTHER EXCHANGE CONDITIONS; ACTS OR OMISSIONS OF EXCHANGES; SPECIALISTS; MARKETS; CLEARANCE ORGANIZATIONS OR INFORMATION PROVIDERS, CIVIL DISTURBANCES; TERRORISM; DELAYS IN MAIL; DELAYS OR INACCURACIES IN THE TRANSMISSION OF ORDERS OR INFORMATION; GOVERNMENTAL, EXCHANGE OR SELF-REGULATORY ORGANIZATION LAWS, RULES OR ACTIONS; OR ANY OTHER CONDITIONS BEYOND THE RELEASED PARTIES' CONTROL. TO THE EXTENT PERMITTED BY APPLICABLE LAWS, YOU AGREE THAT JPMS SHALL NOT HAVE ANY LIABILITY FOR ANY CONSEQUENTIAL, INDIRECT, INCIDENTAL OR ANY SIMILAR DAMAGES, AND YOU IRREVOCABLY AND UNCONDITIONALLY WAIVE ANY RIGHT YOU MAY HAVE TO CLAIM OR RECOVER ANY SUCH DAMAGES (EVEN IF YOU HAVE INFORMED JPMS OF THE POSSIBILITY OR LIKELIHOOD OF SUCH DAMAGES).

10. Arbitration; Consent to Jurisdiction; Service of Process

- a. Securities industry regulations require that any brokerage agreement containing a pre-dispute arbitration provision must include certain disclosure. This Agreement contains a pre-dispute arbitration clause. By signing an arbitration agreement, the parties agree as follows:

1. 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.
 2. Arbitration awards are generally final and binding; a party's ability to have a court reverse or modify an arbitration award is very limited.
 3. The ability of the parties to obtain documents, witness statements and other discovery is generally more limited in arbitration than in court proceedings.
 4. 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.
 5. The panel of arbitrators will typically include a minority of arbitrators who were or are affiliated with the securities industry.
 6. 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.
 7. The rules of the arbitration forum in which the claim is filed, and any amendments thereto, shall be incorporated into this Agreement.
- b. No person shall bring a putative or certified class action to arbitration, nor seek to enforce any pre-dispute arbitration agreement against any person who has initiated, in court, a putative class action, 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 herein.
- c. You agree that all controversies arising under or relating to this Agreement or any activity between you or JPMS and its principals, agents or affiliates, its predecessors and any of its respective successors, assigns, and any of its directors, employees, and any other control persons and any of their agents regarding your Account(s), including, but not limited to, orders, transactions, performance or breach of other agreements between the parties shall be resolved through arbitration. This arbitration agreement extends to any agreements and activities performed before and after the opening of your JPMS Account(s). Such arbitration will be conducted by and according to the securities arbitration rules and regulations then in effect of the Financial Industry Regulatory Authority (FINRA) before an arbitration panel appointed by FINRA in accordance with its rules, and such hearings shall be conducted in a locale selected by FINRA. Either of you may initiate arbitration by filing a written claim with FINRA. Any award of the arbitrators shall be final and binding, and judgment on it may be entered in any court having jurisdiction. This arbitration provision shall be enforced and interpreted exclusively in accordance with applicable federal laws of the United States and the Federal Arbitration Act.

Any costs, fees or taxes involved in enforcing the award shall be fully assessed against and paid by the party resisting enforcement of the award.

Either party may, at any time prior to the initial arbitration hearing relating to such dispute or controversy, seek by application to the U.S. District Court for the Southern District of New York or the Supreme Court of the State of New York for the County of New York any such temporary or provisional relief or remedy (Provisional Remedy) provided for by the laws of the U.S. or the laws of the State of New York as would be available in an action based upon such dispute or controversy in the absence of an agreement to arbitrate. No application for a Provisional Remedy, nor any act by either party relating to such application, shall constitute a waiver of any right to have the underlying dispute or controversy settled by arbitration in accordance with subparagraph (a) above.

With respect to any application for a Provisional Remedy and any application for judgment on an arbitration award, each party irrevocably submits to the jurisdiction of the U.S. District Court for the Southern District of New York or the Supreme Court of the State of New York for the County of New York and waives any objection which it may have at any time to the laying of venue of any proceedings brought in any such court, waives any claim that such proceedings have been brought in an inconvenient forum, and further waives the right to object, with respect to such proceedings, that such court does not have any jurisdiction over such party.

Either party agrees to receive service of process in connection with any legal matters or actions or proceedings, relating in any way to this Agreement, by confirmed, return-receipt requested mail and that delivery shall be presumed if such service is mailed to your address maintained by JPMS in its records and, if to JPMS, the address provided by it, and the requested receipt is returned.

11. Affiliations and Risk

Securities (including mutual funds and variable life insurance) and investment advisory services are offered through JPMS. JPMS, a member of FINRA/SIPC, is an affiliate of Chase Bank. Securities are not bank deposits and are not FDIC insured, nor are they obligations of, or guaranteed by, any federal governmental agency or Chase Bank, JPMS or their affiliates except where specifically disclosed. Securities involve investment risk, including the possible loss of the principal amount invested. You understand that: (i) JPMS affiliates may from time to time issue, underwrite, make a market in, distribute or deal in securities that you authorize JPMS to purchase for your Account; (ii) those securities are not covered by insurance provided by the FDIC; and (iii) in performing execution and clearing services, JPMS may purchase securities from or sell securities to JPMS affiliates.

12. Sales Charge Notice – Breakpoints

When purchasing mutual funds, you may be entitled to a reduction or waiver in sales charges based upon the dollar amount of your cumulative purchases in this and related accounts. You acknowledge that you must refer to the mutual fund's prospectus for specific details to determine if a reduction in sales charges is applicable. JPMS cannot identify and link related accounts including accounts held outside of JPMS or accounts held at JPMS under a different tax identification number unless you provided JPMS with information concerning such accounts, and therefore

you may not realize the full breakpoint opportunity available to you if you do not provide appropriate information to JPMS at the time of your purchase. If the mutual fund for which you seek to obtain a reduced sales charge bases the availability of breakpoints on the historical cost of your holdings (rather than the current value), you will need to supply to JPMS appropriate records showing the historical cost in order to obtain the breakpoint. You acknowledge it is your responsibility to provide this information.

13. Callable Securities

If bonds or preferred stock are held for you in street name or bearer form that are callable in part, you agree to participate in an impartial lottery allocation of the called securities in accordance with applicable rules and regulations. When any such call is favorable, no allocation will be made to any account with respect to which JPMS has actual knowledge that any officer, director or employee of JPMS has any financial interest until all other customers have been satisfied on an impartial lottery basis. If such call is unfavorable, the accounts of customers and associated persons will participate in the impartial lottery on equal terms. You recognize that callable securities are callable by the issuer or its agent and not by you.

14. Cumulative Rights and Remedies; No Waiver

- a. All rights and remedies given in the Account Documents are cumulative and not exclusive of any other rights or remedies that JPMS may otherwise have.
- b. JPMS' failure to insist at any time on strict compliance with any term contained in the Account Documents, or any delay or failure on its part to exercise any power or right given to JPMS in the Account Documents, or a continued course of such conduct on its part shall in no way operate as a waiver of such right or power nor shall any single or partial exercise preclude any further exercise.

15. Amendment; Assignments

Except as otherwise provided herein, no provision of this Agreement or any Account Documents may be waived, altered, modified or amended except in writing and signed by an authorized representative of JPMS. Any assignment of your rights and obligations hereunder or your interest in any property held by or through JPMS without obtaining the prior written consent of an authorized representative of JPMS shall be null and void. You agree that JPMS may amend the Account Documents by modifying or rescinding any of their provisions or by adding new provisions, at any time. In the event that JPMS determines, in its sole discretion, that such amendment is material, it will send notice of the amendment to you. JPMS may assign this Agreement to any subsidiary, affiliate or successor by merger or consolidation, without notice to you, or to any other entity. This Agreement is binding on you, your heirs, executors, administrators, successors and assigns and the successors and assigns of JPMS.

16. Indemnification

You agree to indemnify JPMS and hold JPMS harmless from any loss, damage or liability arising out of any transaction in which it acts, directly or indirectly, as your agent, absent any willful misconduct or grossly negligent conduct by JPMS.

17. SIPC Protection

Accounts held by JPMS, a member of SIPC, receive account protection for the customer's funds and securities positions. SIPC provides \$500,000 of primary net equity protection, including \$250,000 (subject to periodic adjustments for inflation as

provided by law) for claims for cash (**SIPC Coverage**). (For details, including a copy of the SIPC brochure, please call SIPC at (202) 371-8300 or go to sipc.org [follow the link to How SIPC Protects Investors].) Account protection applies when a SIPC member firm fails financially and is unable to meet its obligations to securities customers but does not apply to losses from the rise or fall in the market value of investments or to SIPC-ineligible assets. **You understand SIPC does not protect against declines in the value of the Customer's securities as a result of market fluctuation. You also further understand that this Brokerage Account is not insured by the FDIC.**

18. Responsibility for Orders

You agree to accept full responsibility for monitoring your Account with respect to all transactions you enter. You understand and agree that all such orders are at your sole risk and responsibility and based upon your own determination of your financial circumstances and investment objectives.

19. Applicable Law; Severability

- a. This Agreement (including the Account Documents incorporated by reference herein) and its enforcement shall be governed by and construed in accordance with the law of the state of New York (except those provisions that expressly state that another state's law shall govern).
- b. If any provision of this Agreement shall be held to be invalid or unenforceable, (i) such invalidity or unenforceability shall attach only to such provision, (ii) the invalid or unenforceable provision or term shall be replaced by a term or provision that is valid and enforceable and that comes closest to expressing the intention of such invalid or unenforceable term or provision, and (iii) the validity of the remaining provisions shall not be affected thereby without giving effect to principles governing conflicts of laws.
- c. All transactions entered into under the Account Documents shall be subject to all Applicable Laws. If any provision of Applicable Laws is enacted that would be inconsistent with any of the provisions of the Account Documents, the provision in the Account Documents so affected shall be deemed to be modified or superseded by the enactment, but the remainder of the Account Documents shall remain fully in effect.

20. Account Holder Representations

You represent and warrant that:

- a. You are of the age of majority in your state of residence, and you are authorized to enter into this Agreement.
- b. No one except those agreeing to the terms of this Agreement has any interest in the Account.
- c. The information you have supplied in the Account Application is true and accurate, and you will notify JPMS promptly in writing of any important changes to any of such information, including, but not limited to, any changes in your net worth, income, investment objective, risk tolerance or employment status.
- d. Neither you nor anyone that has an interest in the Account has been designated by the U.S. Department of Treasury's Office of Foreign Assets Control (**OFAC**) as a Specially Designated National or blocked person, that you have no reason to believe that you would be considered a blocked person by OFAC, and that you are not acting as agent of any such person.

- e. Unless agreed to by the parties in writing, all property in your Account(s) shall at all times be free and clear of any liens, claims or encumbrances, except in favor of JPMS.
- f. You shall not take any action or fail to take any action with respect to your Account(s) that would result in a non-exempt prohibited transaction under the Employee Retirement Income Security Act of 1974, as amended (**ERISA**), the Internal Revenue Code of 1986, as amended (the **Code**), or any applicable state, local or non-U.S. law that is similar to the provisions of Section 406 of ERISA or Section 4975 of the Code.
- g. If the undersigned is signing on behalf of others, the undersigned hereby represents that the person(s) or entity(ies) on whose behalf it is signing is/are authorized to enter into this Agreement and that the undersigned is duly authorized to sign this Agreement and make the representations herein in the name and on behalf of such other person(s) or entity(ies).
- h. You and/or anyone approved by JPMS as your agent (**Agent**) speak and read English with sufficient fluency that you can do business with JPMS in that language and further acknowledge that, despite any foreign language accommodation that is made for you, the official language in which JPMS conducts business with you and/or your Agent is English and only communications in that language are binding on the firm.

21. Agency Appointment

You authorize JPMS to appoint and use third parties, sub-agents and independent contractors to carry out its duties under this Agreement. JPMS may act as principal with respect to the purchase or sale of certain securities and other property to me. Securities may also be purchased from another broker-dealer affiliate of JPMS, including securities for which such broker-dealer is the underwriter, placement agent or dealer, and from mutual funds for which Chase Bank and other JPMorgan Chase & Co. affiliates may act as investment advisors and receive investment advisory fees and other compensation for such services.

22. Joint/Life Estate/Usufruct Account Ownership

- a. For all forms of joint ownership, including community property, each account holder of the Account, subject to JPMS policies and procedures, has full and independent authority: (i) to buy, trade, sell and withdraw assets; (ii) to receive confirmations, statements, notices and other communications; and (iii) to generally act as if each were the sole account holder of the Account, all without notice to the other joint account holders. Notice to one account holder has the same effect as notice to all account holders. Each account holder is jointly and severally liable for all aspects of the Account.
- b. For Accounts designated as Joint Tenants with Rights of Survivorship (**JTWROS**), in the event of the death of one of the account holders, the entire interest in the Account shall be vested in the survivor(s) on the same terms and conditions as theretofore held.
- c. JPMS can, in its sole discretion: (i) require that all joint account holders approve or direct any given action, request or direction (including requiring written directions); and (ii) make any distribution or withdrawal to all account holders jointly, regardless of which joint account holder made the request.
- d. If conflicting instructions are received from joint account holders, or if JPMS reasonably believes it may be at risk acting

on any instructions as to an Account with joint account holders, JPMS may do any of the following: (i) choose which instructions to follow and which to disregard; (ii) suspend all activity in the Account; (iii) require or take appropriate legal action; and (iv) close the Account and deliver all assets, net of liabilities, debts and fees owed to the joint tenants at the address of record in accordance with the terms of this document.

- e. If the Account is opened as a Community Property account, it will be subject to the provisions applicable to joint accounts as provided in this Section 22, and by so opening the Account, each account holder agrees that each of them shall have a community property interest in the Account and all property in the Account as husband and wife. Each account holder of a community property account agrees that each of them shall have full authority to act on behalf of the community account, and that this authority is in lieu of all power, right or privilege of either of the account holders to exercise management or control over the community account as may be bestowed upon either or both as husband and wife by the laws of the applicable state. The account holders agree that in the event of either party's death or other event that causes a change in the party's interest in the Account, the surviving party or other party, as the case may be, shall immediately give JPMS written notice thereof, and JPMS may, before or after receiving such notice, take such actions; require such documents, inheritance or tax waivers; retain such portion of the Account; and impose such restrictions on the Account as JPMS may deem necessary under the circumstances. The estate of the deceased account holder shall be liable and the survivor shall continue to be liable, jointly and severally, to JPMS for any obligation in any way resulting from the completion of transactions initiated prior to the receipt and processing (as described above) by JPMS of the written notice of the death of the deceased account holder or termination of the community, and for any expenses incurred in the liquidation of the Account or adjustment of the interests of the parties.
- f. Accounts designated as Joint Tenants in Common (**TIC**) will be deemed to provide for equal ownership among all joint in common account holders unless all joint in common account holders notify JPMS in writing of a different division of ownership. In the event of the death of either or any of the account holder(s), the interests in the Account as of the close of business on the day of the death of the deceased account holder shall be distributed in equal proportions to the number of account holders unless JPMS is notified in writing otherwise.
- g. If the Account is opened in only one name (the **Listed Owner**) but constitutes community or marital property under the law of any applicable state, the Account is subject to the sole control of the Listed Owner, and JPMS is entitled to rely on any instructions of the Listed Owner. Upon death of either spouse or termination of the marriage, JPMS continues to be permitted to rely solely upon the instruction of the Listed Owner, but a court may order JPMS to dispose of assets in the Account in any manner the court directs.
- h. If the Account is opened as a Life Estate/Usufruct account, it will be subject to the provisions applicable to joint accounts as provided in this Section 22, and the Remainderman(en)/Naked Owner(s) jointly and severally agree that the Life Tenant/Usufructuary shall have authority on behalf of the Account to: (i) buy, trade, sell and withdraw assets; (ii) receive confirmations, statements, notices and other

communications; and (iii) generally act as if the Life Tenant/Usufructuary were the sole account holder of the Account, all without notice to the Remainderman(en)/Naked Owner(s). Notice to the Life Tenant/Usufructuary has the same effect as notice to all Remainderman(en)/Naked Owner(s). The undersigned hereby agree jointly and severally to hold JPMS harmless from and against any and all losses, liabilities and claims arising from or related in any way to the authority conferred herein. In the event of the death of the Life Tenant/Usufructuary, the entire interest in the Account shall be vested in the Remainderman(en)/Naked Owner(s). The undersigned jointly and severally agree, on behalf of each of the undersigned and on behalf of the respective estates of each of the undersigned, that the authority hereby conferred by each upon the other(s) shall survive the respective deaths of either or any of the undersigned and direct that all notices and communications be sent to the address of record for the Account.

23. Powers of Attorney

If you designate an attorney-in-fact to act with respect to your Account, you agree that you must do so in a form acceptable to JPMS and supply such additional documents as JPMS requests. JPMS reserve the right to refuse to honor any power of attorney presented to them, to refuse to follow the instructions of any attorney-in-fact with respect to a specific request or transaction or a request to designate or change a TOD/POD or Retirement Plan beneficiary, or to change ownership of the Account. You agree that JPMS is authorized, but not required, to honor a power of attorney until JPMS has received written notice from you that you have revoked the power of attorney or until the power of attorney has been revoked as a matter of state law. You also understand that JPMS has the right to refuse to recognize a successor attorney-in-fact.

24. No Investment Advice

- a. Unless otherwise agreed in writing, JPMS will act only as your broker-dealer and not as an investment advisor. You understand that JPMS will not provide any investment advice for your Account(s) even if you maintain other JPMS accounts for which you do receive recommendations or advice, either from a financial advisor or through a managed program.
- b. Unless otherwise agreed in writing, JPMS does not have any discretionary authority or obligation to make recommendations for the investment of cash or securities in your self-directed account or to review your investment choices.

25. Control or Restricted Securities

If any of the securities you ask JPMS to sell are: (i) "restricted securities" or securities of an issuer of which you are an "affiliate" (as those terms are defined in Rule 144 under the Securities Act of 1933, as amended); or (ii) securities that are being sold in reliance on Rule 701 or 145(d) under such Act; or (iii) securities of which you and the issuer or underwriter have entered into an agreement restricting the transferability of such securities, you agree to tell JPMS the status and details of any restrictions on your ability to sell such securities prior to placing an order and to promptly furnish all documents and information necessary to comply with regulatory requirements. You understand that furnishing such information and documents does not constitute an order to sell such securities and that you must place a separate order to sell such securities. You agree that you will be responsible for all costs, including the cost to repurchase stock, if you sell stock that is later determined to be restricted or

not transferable. You understand that restricted/control securities transactions require special handling by JPMS and third parties and that processing such transactions may take several weeks, during which time the price of such securities may fluctuate. You further agree not to hold JPMS liable for delays in the sale or settlement of such securities resulting from the failure of issuer's counsel to issue or approve any necessary legal opinion, the failure of the transfer agent to process shares, or any other action or failure to act of a third party. You acknowledge that if you are an employee or "affiliate" of the issuer of a security, any transaction in such security may be governed by the issuer's insider trading policy. You agree to comply with such policy and acknowledge that any reporting obligations with respect to such securities and/or transactions are your responsibility.

ELECTRONIC AND/OR EXTRA SERVICES

26. Internet and Telephone Access

Online investment services are services of JPMS. Such online investment services through chase.com or jpmorganonline.com and related websites allow you to transmit orders to purchase and sell securities electronically through your computer, and to communicate electronically with JPMS regarding your Account(s). JPMS may also provide automated telephone services that allow you to enter orders to buy and sell certain securities and mutual funds and obtain quotations and other information via electronic transmissions.

27. Electronic and/or Extra Services; Services Provided Generally

- a. JPMS may from time to time directly or indirectly make available to you or your agents or provide or arrange access for you or your agents to various electronic systems and services, automated phone services, and non-broker-dealer services (collectively, **Electronic and/or Extra Services**), including, without limitation: (i) any device, software, network or system used by you for the purpose of entering, facilitating or routing orders through Trading Systems; (ii) any software, system, electronic functionality or service, including, without limitation, interactive devices, internet capability, functionality, site or service, hardware, device or communications facility (**Electronic Tools**); (iii) any research reports or materials, market data (including any valuations of securities or other investments), news, documents and other information, reports, analytics, calculators, data or content whether provided through Electronic Tools or otherwise (**Content**); (iv) any electronic access to view your holdings, values and transactions along with statements, confirmations, reports or information relating to an Account or activity therein; and/or (v) any products or services not directly related to JPMS' business as a broker-dealer, including, but not limited to, the ability to participate in JPMS' purchasing programs. All or any part of the Electronic and/or Extra Services may be developed, licensed and/or provided by third-party licensors, vendors, subcontractors or other third-party sources (collectively, **Sources**). JPMS and/or any Source, at any time, with or without notice, may monitor, modify any aspect of, limit or terminate your use or access to any or all of the Electronic and/or Extra Services.
- b. In addition, Electronic and/or Extra Services will also be subject to the terms of all online agreements and such other agreements (collectively, **Online Agreements**) that govern your or your agents' use of Electronic and/or Extra Services and the rights and responsibilities of JPMS and you with respect to particular Electronic and/or Extra Services. By

opening and using your Account, you will be deemed to have consented to the terms of the Online Agreements. In the event of a conflict between this Agreement and the Online Agreements, this Agreement will control.

- c. JPMS and/or the Source(s) may provide you or your agents (each of the foregoing an **Authorized User**) with identifiers and/or security devices or prescribe security procedures relating to use or access to some or all of the Electronic and/or Extra Services, which may include, but may not be limited to, any digital certificate(s), unique identifiers, user name(s) and/or password(s) under separate cover which may be required to access or use the Electronic and/or Extra Services (collectively, **User Code(s)**). You agree that: (i) you will not, nor will you permit any other person to, remove, modify, exchange, disable, penetrate or otherwise defeat any such security procedures; (ii) you shall restrict access to the User Codes and to the Electronic and/or Extra Services to those persons who are duly authorized to have such access on your behalf; (iii) you shall notify JPMS or other applicable Source immediately in writing in the event that (A) the authority of any Authorized User has been or is about to be terminated (in which case you will promptly return to JPMS any security device previously issued to such Authorized User); (B) any such User Code is lost or stolen, or the confidentiality of any such User Code issued to any Authorized User has been compromised in any way; or (C) you learn about a possible or actual unauthorized access to and/or use of the Electronic and/or Extra Services; (iv) you are responsible for all acts or omissions that occur under any User Code provided to an Authorized User; and (v) you are responsible for ensuring that all information contained in any request for a User Code is complete and correct.
- d. You will be responsible for all orders, instructions and transactions that are identified by any of the Electronic and/or Extra Services as coming from an Authorized User and all consequences thereof, whether entered by an Authorized User or by any other person. Furthermore, you agree that any agreement, consent or assent communicated from such access to the Electronic and/or Extra Services under a User Code issued to one of the Authorized Users will be deemed to be duly signed in writing of yours sufficient to bind you thereto.
- e. JPMS may from time to time provide you or your agents with access to Electronic Tools and/or Content. JPMS obtains such Electronic Tools and/or Content from Sources they believe to be reliable. The accuracy, completeness, timeliness or correct sequencing of the Electronic Tools and/or Content, however, cannot be guaranteed by JPMS or any Source. You acknowledge and agree that neither JPMS nor the Sources will be liable for the accuracy, availability or usage of such Electronic Tools and/or Content and that neither JPMS nor the Sources will have any duty to verify, correct, complete or update any Electronic Tools and/or Content.
- f. JPMS and its respective control persons, successors and assigns, officers, directors, employees and agents and the Sources hereby expressly disclaim any and all warranties, guaranties, conditions, covenants and representations relating to any Electronic and/or Extra Service, including, but not limited to, any relating to merchantability, quality, accuracy, fitness for a particular purpose, title, non-infringement, timeliness, currency, absence of viruses or damaging or disabling code, and any warranties or representation (i) that any Electronic and/or Extra Service or access to any portion of it will be uninterrupted or error-free,

or (ii) that any defects in such Electronic and/or Extra Services will be correctable or corrected. Notwithstanding anything herein to the contrary, neither JPMS nor the Source will be liable for any loss, cost, claim or damage (including, but not limited to, direct, indirect or consequential damages or lost profits) arising out of or otherwise relating to any Electronic and/or Extra Services or the use or access to or unavailability of any of the same.

- g. Notwithstanding any tools or support JPMS provides to you, you have sole responsibility for and will ensure your compliance with any and all Applicable Laws that may apply to: (i) your use of any of the Electronic and/or Extra Services; and (ii) any transaction executed through, or order or instruction communicated using, any of the Electronic and/or Extra Services or otherwise.

28. License, Confidentiality and Use

- a. You agree that JPMS has granted you and your Authorized Users a nonexclusive, nontransferable license for the term of this Agreement to access and use the Electronic and/or Extra Services as they may be amended from time to time. You agree to keep confidential and not publish, broadcast, retransmit, reproduce, commercially exploit or otherwise re-disseminate the data, information or services provided under this Agreement. You agree that the Electronic and/or Extra Services are JPMS' proprietary property or the proprietary property of third parties from whom JPMS has obtained rights to provide access to its customers and that the Content is protected by copyright. You agree not to assign, sublicense or otherwise convey or transfer your rights under this Agreement to another person or entity. You agree not to reproduce, retransmit, disseminate, sell, distribute, publish, broadcast, circulate or commercially exploit, in any manner, any aspect of the Electronic and/or Extra Services provided hereunder, including, without limitation, the Content, without JPMS' or a Source's, as applicable, express written consent. You agree to comply with JPMS' reasonable written requests to protect contractual, statutory and common law rights in the Content. You shall be responsible for the confidentiality and use of your password(s), ID(s) and other security data, methods and devices. You understand that you shall be solely responsible for all orders electronically transmitted, or use of any data, information or services obtained, using your passwords and other security data. You agree not to use the Electronic and/or Extra Services except as authorized by this Agreement.
- b. You agree that you shall use the Electronic and/or Extra Services for your personal, noncommercial use only. You will use the information that you access through the Electronic and/or Extra Services solely in connection with your Account with JPMS and not in connection with your trade or business. If you are a securities broker-dealer, investment advisor, futures commission merchant, commodities introducing broker or commodity trading advisor, or member of a securities exchange or association or futures contract market (or an owner, partner, agent or associated person of any of the foregoing), you will not use the Electronic and/or Extra Services to perform functions related to securities or commodities futures trading or business activities except with respect to your Account. If you are employed by a bank or insurance company or an affiliate of either that performs functions related to securities or commodity futures trading activity, you will not use the Electronic and/or Extra Services to perform functions for any securities or commodities futures

trading or business activities. Any use of these services will solely be for your J.P. Morgan Self-Directed Investing account.

29. Electronic Orders and Information

You further understand and agree that any orders given by you and any information furnished to you by use of the Electronic and/or Extra Services, in addition to Section 4 of this Agreement, shall be subject to the following terms and conditions:

- If an order has been placed through the Electronic and/or Extra Services and you have not received an accurate written confirmation pursuant to this Agreement, you shall immediately notify JPMS. It is your responsibility to check by the automated telephone trading system or the order status screen online to determine whether any order placed through the Electronic and/or Extra Services was rejected or otherwise not executed.
- You understand that if an order has been placed through the Electronic and/or Extra Services, you will receive the price at which such order executes in the marketplace, which may be different from the price at which the security or option is trading when you enter your order into the Electronic and/or Extra Services.
- You understand that only unsolicited orders may be entered through the Electronic and/or Extra Services. You will not place orders for your Account that are based on recommendations from JPMS or any of its affiliates.
- You understand that if you place a request to cancel an order through the Electronic and/or Extra Services, the cancellation of that order is not guaranteed. You understand your order will only be cancelled if your request is received in the marketplace and matched up with your original order before the original order executes. Market orders are subject to immediate execution. During market hours, it is rarely possible to cancel market orders.
- If you have received confirmation of an order that you did not place or any similar conflicting report, you shall immediately notify JPMS.
- You understand that JPMS, from time to time, receives late reports from exchanges and market makers reporting the status of transactions. Accordingly, you understand that you will be subject to late reports related to orders that were previously unreported to you or reported to you as being expired, cancelled or executed. In addition, any reporting or posting errors, including errors in execution prices, will be corrected to reflect what actually occurred in the marketplace.
- You shall immediately notify JPMS if there is a discrepancy in your account balance or security positions.
- You understand that notifications to JPMS under this Electronic and/or Extra Services Agreement must be by email at the address posted on the chase.com or jpmorganonline.com or, where immediate notification is not required, in writing directed to J.P. Morgan Securities LLC, Attn: Client Services, at the address listed on the front of your Account statement.
- If you fail to notify JPMS by email or in writing as required above when any of the above conditions occur, or when any of the conditions described in Section 27(c) occur, JPMS and any of its respective employees, agents, affiliates, subsidiaries or parent companies, and any third parties, cannot or will not have any responsibility or liability to you or to any other person whose claim may arise through you for any claims with

respect to the handling, mishandling or loss of any order. You understand that JPMS shall not be deemed to have received any order electronically transmitted by you until you have received an acknowledgement that the order has been received for your Account. You accept full responsibility for the monitoring of your Account and for any of your instructions, including any error therein.

- Any liability, if any, arising out of any action or omission by JPMS to provide Electronic and/or Extra Services to you hereunder shall be limited to an amount equal to the benefit that would have resulted from the transaction during the 5 business days in which you should have acted.
- Termination of this Agreement shall be deemed a cancellation of all of your outstanding orders, if any, submitted before the effective date of such termination of this Agreement.

30. Consent to Transmission of Personal Information

You recognize that your use of Electronic and/or Extra Services, or the use of the phone to place an order with or otherwise speak with a customer service representative, may involve the transmission to JPMS of information that may be considered personal financial information, including, but not limited to, the identity and number of shares that you trade and the net dollar price for the shares. You consent to the transmission by telephonic or electronic means of such information through any system, service or product. Such consent shall be effective at all times that you use any such system, service or product.

31. Additional Indemnity for Electronic and/or Extra Services

You agree to indemnify and hold JPMS and the Sources, as applicable, harmless from and against any and all claims, losses, liability, costs and expenses (including, but not limited to, attorney fees) arising from your violation of the portions of this Agreement relating to Electronic and/or Extra Services or from your violation of any third party's rights, including, but not limited to, copyright, proprietary and privacy rights. In addition, if you allow third parties to access the Electronic and/or Extra Services (including your Account), you will defend and indemnify JPMS against any liability, costs or damages (including attorney fees) arising out of claims or suits by such third parties based upon or relating to such access and use. This indemnification and hold-harmless obligation will survive the termination of this Agreement.

32. Termination of Electronic and/or Extra Services

You agree that JPMS may discontinue any of the Electronic and/or Extra Services, in whole or in part, at any time and that JPMS may modify or change the terms of such services and any fees charged, in whole or in part, at any time and from time to time. You agree that JPMS may immediately terminate your Account or your access to the Electronic and/or Extra Services (i) if you breach this Agreement; (ii) if you make, or allow any third party to make, any unauthorized use of the Electronic and/or Extra Services; or (iii) if you have jeopardized the proper and efficient operation of the Electronic and/or Extra Services.

GENERAL PROVISIONS

33. JPMS Business Continuity Message

JPMS maintains a business continuity plan, including alternate processing and data centers, which will allow JPMS to resume normal business operations in the event of an extended business disruption. This plan is reviewed annually and updated as necessary. The plans outline the actions JPMS will take in the

event of a local or regional business disruption, including relocating technology and operational personnel to preassigned alternate facilities. All operational facilities are equipped to resume business and are tested several times per year. The recovery time objective for business resumption, including those involving a relocation of personnel or technology, is 24 hours. Investors will be able to obtain information about their JPMS account by calling the phone number listed on the front of your Account statement or by visiting JPMS online at chase.com, jpmorganonline.com or related websites within 24 hours of any business disruption. Every effort will be made to provide investors with timely and accurate information as quickly as possible following any disruption.

34. Other Agreements; Additional Rights; Entire Agreement

The rights and remedies granted in this Agreement are in addition to any other rights and remedies that arise under other agreements you may have with JPMS. The provisions of this Agreement shall supersede any inconsistent provisions of any other agreement entered into between you and JPMS concerning the subject matter contained in this Agreement, unless such other agreement expressly states that the terms shall supersede this Agreement. Except as set forth above, this Agreement represents the entire agreement and understanding between you and JPMS concerning the subject matter contained in this Agreement.

35. Headings

The headings of the provisions hereof are for ease of reference only and shall not affect the interpretation or application of this Agreement or in any way modify or qualify any of the rights or obligations provided for hereunder.