



BROKERAGE ACCOUNT DISCLOSURES

Effective March 1, 2019

T. Rowe Price Investment Services, Inc.

GENERAL INFORMATION

The following disclosures contain important information. Please read the disclosures carefully and retain them for future reference. If you have questions concerning any of the disclosures, please call customer service at 1-800-225-7720.

The words “I,” “myself,” “me,” and “my” refer to the person(s) who signed the New Account Form. “Price” refers to T. Rowe Price Investment Services, Inc. “Price Funds” refers to mutual funds sponsored by T. Rowe Price Associates, Inc. “Pershing” refers to Pershing LLC, a subsidiary of The Bank of New York Mellon Corporation, Price’s clearing broker for my Account. The term “Account” refers to my Brokerage account.

- 1. Additional Clearing Broker Information. Disclosure Required by FINRA Rule 4311.** Price has retained Pershing to provide certain recordkeeping or operation services. These services—such as the execution and settlement of securities transactions, custody of securities and cash balances, and extension of credit on margin transactions—are provided under a written Clearing Agreement between Pershing and Price. As a member of FINRA, Pershing is required (under FINRA Rule 4311) to disclose to me the details of Pershing’s Clearing Agreement with Price, which are summarized below.

Responsibilities of Price

Price has the responsibility to:

- Approve the opening of my Account
- Obtain necessary documentation to help fight the funding of terrorism and money laundering activities (Note: U.S. law and international best practices require firms to obtain, verify, and record information that identifies each person who opens an account. This information may be used to perform a credit check and verify my identity through internal sources and third-party vendors)
- Service and supervise my Account through its own personnel in accordance with its own policies, procedures, applicable laws, regulations and rules.
- Know me and my stated investment objective
- Determine whether particular kinds of transactions—such as margin, options, and short sale—are appropriate for me
- Obtain the initial margin as required by Regulation T if a margin account is opened for me
- Accept and, in certain instances, execute securities orders
- Know the facts about any orders for the purchase or sale of securities in my Account
- Comply with fair pricing and disclosure responsibilities (if Price is a market maker in any securities or otherwise trades as principal with me)
- Correctly identify and promptly forward cash or securities intended for my Account to Pershing
- Supervise the activities of any individual who services my Account
- Resolve any complaints regarding the handling of my Account
- Manage the ongoing relationship that it has with me

Pershing has no involvement and assumes no responsibility in all of the above matters relating to the servicing of my Account.

Responsibilities of Pershing

To help the government fight the funding of terrorism and money laundering activities, financial organizations are required by Federal law to obtain, verify and record information that identifies each individual or entity that opens an account or requests credit. What this means for individuals: When an individual opens an account or requests credit, Price or Pershing will ask for my name, residential address, date of birth, tax identification number and other information that allows Price or Pershing to identify me. Price or Pershing may also ask to see a driver's license, passport or other identifying documents.

What this means for other legal entities: When a corporation, partnership, trust or other legal entity opens an account or requests credit, Price or Pershing will ask for the entity's name, physical address, tax identification number and other information that will all Price or Pershing to identify the entity. Price or Pershing may also ask to see other identifying documents, such as certified articles of incorporation, partnership agreements or a trust instrument.

In general, Pershing is only responsible for the services within the scope of the Clearing Agreement that is provided at the request of Price and contains specific direction regarding my Account. As such, Pershing may fulfill the following responsibilities on behalf of my Account:

- Create computer-based account records
- Process orders for the purchase, sale, or transfer of securities (Pershing is not obligated to accept orders directly from me and will do so only in exceptional circumstances)
- Receive and deliver cash and securities
- Record such receipts and deliveries according to information provided either by Price or directly, in writing, by me
- Hold securities and cash in custody (after it comes into Pershing's physical possession or control)
- Collect and disburse dividends, capital gains, and interest
- Process reorganization and voting instructions with respect to securities held in custody
- Prepare and transmit confirmations of trade to me (or provide facilities to Price to provide these functions) with the exception of the following transactions, which will alternatively appear on account statements:
 - Systematic purchase and redemption transactions of mutual funds or unit investment trusts
 - Purchase and redemption transactions of money market funds processed through Pershing's Cash Management platform, provided that there are no purchase and redemption fees
 - Dividend and other distribution reinvestment transactions of mutual funds, equities, and unit investment trusts
 - Dividend and other distribution reinvestment transactions of money market funds, provided that there are no reinvestment fees
- Prepare and transmit periodic account statements summarizing transactions
- Provide Price with written reports of all transactions processed for my Account to enable Price to carry out its responsibilities under the Clearing Agreement
- Assist me and Price with any discrepancies or errors that may occur in the processing of transactions

If Price opens a margin account for me, Pershing may:

- Loan me money for the purpose of purchasing or holding securities (subject to the terms of Pershing's written Margin Agreement, margin policies, and applicable margin regulations)
- Calculate the amount of maintenance margin required and advise me of those requirements (usually through Price)
- Calculate any interest charged on my debit balance

In connection with all of the functions that Pershing performs, Pershing maintains the books and records required by law and business practice.

The Clearing Agreement does not encompass transactions in commodities futures contracts or investments other than marketable securities, which Pershing normally processes on recognized exchanges and over-the-counter (OTC) markets. In furnishing Pershing's services under the Clearing Agreement, Pershing may use and rely upon the services of clearing agencies, automatic data processing vendors, proxy processing, transfer agents, securities pricing services, and other similar organizations.

This document addresses the basic allocation of functions regarding the handling of my Account. It is not meant as a definitive enumeration of every possible circumstance, but only as a general disclosure.

Pershing does not control, audit, or otherwise supervise the activities of Price or its employees.

Pershing does not verify information provided by Price regarding my Account or transactions processed for my Account.

Pershing does not undertake responsibility for reviewing the appropriateness of transactions entered by Price on my behalf.

Complaints—Complaints concerning services provided by Pershing may be directed to:

Complaints

Pershing LLC Legal Department
One Pershing Plaza, Tenth Floor
Jersey City, NJ 07399

2. Pershing Statement of Financial Condition. On December 31, 2018, Pershing's regulatory net capital of \$2.83 billion was 16.5% of aggregate debit items and \$2.49 billion in excess of the minimum requirement. A complete copy of the December 31, 2018, Statement of Financial Condition is available at: www.pershing.com/statement-of-financial-condition. You may request a free printed copy by calling (888) 860-8510.

3. Payment for Order Flow Practices. The following statement is provided to me as required by Rule 607 of the Securities Exchange Act of 1934. Pershing sends certain equity orders to exchanges or broker-dealers during normal business hours and during extended trading sessions. Some of these market centers provide payments to Pershing or charge access fees depending upon the characteristics of the order and any subsequent execution. In addition, Pershing may execute certain equity orders as principal or route orders to an affiliate, called BNY Mellon Capital Markets, LLC, which may also execute as principal while facilitating the trade as a market maker. The details of these payments and fees are available upon written request. Pershing receives payments for directing listed options order flow to certain option exchanges through broker-dealers, which allows Pershing to access price improvement auctions on the various option exchanges. Compensation is generally in the form of a per-option contract cash payment. This disclosure only applies to orders directed to Pershing by Price. For a list of organizations that pay Pershing for order flow, please refer to orderroutingdisclosures.com.

Stop Order Election/Trigger. Equity odd-lot sales count toward consolidated and participant exchange volumes, but do not update the last-sale, open, close, high or low price. Since odd-lot executions are not last-sale eligible, they will not trigger non-directed stop, stop-limit or trailing-stop orders routed to Pershing for execution.

Best Execution. Notwithstanding the previous paragraph regarding payment for order flow, Pershing selects certain market centers for routing non-direct orders that offer the opportunity for the following:

- Provide automated execution of substantially all electronically transmitted orders in over-the-counter (OTC) and exchange-listed securities

The designated market centers to which orders are routed are selected based on the following:

- The consistent high quality of their executions in one or more market segments
- Their ability to provide opportunities for executions at prices superior to the national best bid or offer (NBBO)
- Service, accessibility and speed of execution
- Cost and counterparty credit worthiness.

Pershing also regularly reviews reports for quality of execution purposes.

4. T. Rowe Price Business Continuity Disclosure. T. Rowe Price Group, Inc., the ultimate parent company of T. Rowe Price, maintains Business Continuity Plans (Plans). The Plans will be updated as necessary and will be reviewed annually. The Plans address how T. Rowe Price will handle disruptive events (Events) of varying scope (e.g., an internal business disruption, an external business disruption, an Event during business hours, or an Event during nonbusiness hours). The Plans include backup facilities for critical data and systems, as well as for critical employees. The Plans are designed to continue business operations if an Event should occur. T. Rowe Price has three call centers located in various areas of the country, which allows for continuation of communication with our customers if one or more sites are affected. T. Rowe Price offers three methods for accepting trades—online Account Access, Tele-Trader touch-tone order-entry system, and

speaking to a registered representative. If any one method fails, the Plans provide adequate coverage to meet demands of T. Rowe Price customers to submit trade orders and inquire about other account service issues. Additionally, T. Rowe Price maintains daily off-site backup for critical systems and data.

If T. Rowe Price experiences a significant business interruption, T. Rowe Price customers may contact Pershing at 201-413-3635 for recorded instructions about the processing of limited trade-related transactions, cash disbursements, and security transfers.

5. Pershing Business Continuity Disclosure. To address interruptions to Pershing's normal course of business, Pershing maintains a business continuity plan, which includes geographically dispersed data centers and processing facilities. The plan is annually reviewed and updated as necessary. The plan outlines the actions Pershing will take in the event of a building, city, or regional incident, including:

- Continuous processing support by personnel located in unaffected facilities.
- Relocating technology or operational personnel to alternate regional facilities.
- Switching technology data processing to an alternate regional data center.

All Pershing operational facilities are equipped for resumption of business and are tested. Regarding all circumstances within Pershing's control, Pershing's recovery time objective for business resumption is four (4) hours or less, depending upon the availability of external resources. In the event Price experiences a significant business interruption, I may contact Pershing to process limited trade-related transactions, cash disbursements, and security transfers. Instructions to Pershing must be in writing and transmitted via facsimile at 201-413-5368 or by postal service to: Pershing LLC, P.O. Box 2065, Jersey City, NJ 07303-2065.

For additional information about how to request funds and securities when your firm cannot be contacted due to significant business interruption, please select the Business Continuity and Other Disclosures link at the bottom of the home page on the Pershing website at pershing.com. You may also call (201)413-3635 for recorded instructions. If you cannot access the instructions from the above website or telephone number, you may call (213)624-6100, extension 500, an alternate Pershing number for recorded instructions.

6. SIPC Contact Information. Information regarding SIPC, including a SIPC brochure, may be obtained by contacting SIPC via its website at sipc.org or by telephone at 202-371-8300.

7. FINRA BrokerCheck Program. An investor brochure that includes information describing FINRA BrokerCheck may be obtained from FINRA. The FINRA BrokerCheck Hotline Number is (800) 289-9999. The FINRA website address is finra.org.

8. Municipal Securities Rulemaking Board (MSRB) Investor Education and Protection. An investor brochure that described the protections available under MSRB rules and instructions on how to file a complaint with an appropriate regulatory authority can be found on the MSRB website, msrb.org.

Price and Pershing are registered with the Securities and Exchange Commission (SEC), MSRB and FINRA. Pershing is also registered with NYSE.

9. Lost Securities. If my periodic customer account statement indicates that securities were forwarded to me and I have not received them, I should notify Price or Pershing immediately. If notification is received within 120 days after the mailing date, as reflected on my periodic statement, replacement will be made free of charge. Thereafter, a fee for replacement may apply.

10. Special Note for Non-U.S. Accounts. With respect to assets custodied by Pershing on my behalf, income and capital gains or distributions to me from my Account may be taxable in my home jurisdiction and/or country of tax residence. I should consult my tax advisor for the appropriate tax treatment of my transaction.

11. Important Notice for California Residents. Pursuant to California state law (Part 3, Title 10, Chapter 7) Pershing, as custodian of my assets, may be required to transfer my assets to the State of California in the event that no activity occurs within the statutorily defined time period. The state law defines the time period as 24 to 30 months where there is no activity within the account, or communication between the account owner and the firm.

12. Escheatment of Account Assets. Pursuant to individual state laws Pershing, as custodian of my assets, may be required to transfer my assets to the State of my residence in accordance with state laws.

13. Electronic Confirmations. Certain customers receive electronic confirmations through Depository Trust Company (DTC) or other delivery systems in lieu of hard-copy confirmations. I should be aware that all of the terms, conditions, and

disclosures set forth on such hard-copy confirmations will continue to apply to each confirmation processed electronically, including the following:

- Securities purchased on a cash or margin basis are, or may be, hypothecated and, under such circumstances, commingled with securities carried for other clients. Such securities will be withdrawn from hypothecation after receipt of payment.
- If sufficient funds are not already in my cash Account to cover a purchase transaction, it is agreed that I will (1) make full payment for the securities described on the confirmation no later than the stated settlement date and (2) not to sell such securities prior to making payment.
- If Pershing does not receive full payment for securities purchased by me, Pershing may, at its option, cancel the transaction without notice to me.
- If sold securities are not already held in my account with Pershing, it will act upon my representation that I or my principal own such securities. It is agreed that I will deposit the securities with Pershing no later than the transaction settlement date.
- If the securities sold by me are not delivered to Pershing in proper form on or after the first trading day after settlement date, Pershing may, at its option, cancel or otherwise liquidate the transaction without notice to me.
- I will be liable to Pershing for any loss without limitation, including all expenses, attorney's fees and other costs incurred by Pershing, and interest thereon, as a result of a cancelled or liquidated transaction.
- Call features may exist for securities. Call features for fixed income securities may affect yield. Complete information will be provided on request.
- The ratings that appear in the description of some fixed income securities have been obtained from rating services that Pershing believes to be reliable. However, Pershing cannot guarantee their accuracy. Securities for which ratings are not available are marked "UNRATED".
- With transactions involving a security that (1) has an interest in or is secured by a pool of receivables, or (2) is subject to continuous prepayment, such as asset-backed or collateralized mortgage obligations (CMOs), the actual yield of such security may vary according to the rate at which the underlying asset is prepaid. Information concerning the factors that affect yield (including estimated yield, weighted average life and the prepayment assumptions of underlying yield) will be furnished upon request.
- It is understood and agreed that all transactions are subject to the rules and customs of the exchange or market (and its clearing house, if any) where they are executed. The name of the broker or party and the time of execution will be furnished upon request.
- Commission rates are subject to negotiation. Any commission charged to you may be more or less than commissions charged to or by others in similar transactions. The source and amount of other commissions charged by Pershing in connection with the transaction will be furnished upon request.
- Provisions of agreements and contracts shall inure to any successor of Price or Pershing. Agreements and contracts are governed by the laws of the state of New York.

14. Float Disclosure. Pershing may obtain a financial benefit attributable to the cash balance in any account, (including Employee Retirement Income Security Act (ERISA) accounts) that are held by Pershing in accounts that it has with major money center banks (the names of which will be provided upon request). These cash balances result from (1) cash awaiting investment or (2) cash pending distribution. Pershing's financial benefit may be in the form of interest earned on such balances and/or reductions in interest expenses that Pershing would otherwise pay to such money center banks. To the extent that the financial benefit is in the form of interest paid to Pershing, it is often paid at the federal funds rate.

With respect to cash awaiting investment (e.g., new contributions), Pershing obtains such financial benefit until the funds are invested in a money market fund or are used to purchase securities. If an account agreement provides for the automatic investment into a money market fund, such investments will take place on the day after the receipt of cash (and the financial benefit will be one day), unless instructions are received to manually purchase money fund shares on the same day that the cash is received. Such instructions must be received before the cutoff time established by each money market fund available to the account. If the account agreement does not provide for automatic investment into a money market fund, such investment will take place on the day after the receipt of appropriate instructions.

When Pershing receives a request for a distribution by check, the account is charged (debited) on the date the check is written. Cash is transferred to a Pershing disbursement account maintained with a major money center bank on the day the check is presented for payment. Pershing mails disbursement checks on the same day that they are written. Pershing may obtain the financial benefit described above from the date the check is written until the date the check is

presented for payment, the timing of which is beyond the control of Pershing. When a distribution is requested using an Automated Clearing House instruction, Pershing receives a one-day financial benefit in connection with the distribution. If the distribution is made using the Federal Reserve wire system, Pershing receives no financial benefit in connection with the distribution.

- 15. Important Information on Check Disbursements.** In situations where I request a check disbursement from my Brokerage Advantage account, Pershing will receive and retain any interest or earnings generated on the amount of the check from the date that it is disbursed until its final settlement and payment.
- 16. Dollar-Cost-Averaging Transactions.** Price offers a dollar-cost-averaging program pursuant to which I can participate in dollar-cost-averaging transactions. Only certain securities are eligible for participation. If I participate in the program, Price will periodically purchase or sell shares of eligible securities on a monthly basis. I authorize Price to act as my agent on dollar-cost-averaging transactions and to receive compensation from a mutual fund company. I understand that participation in these transactions does not assure profits on my investments or protect against losses in declining markets.
- 17. Prohibition against Unlawful Internet Gambling.** In accordance with the Unlawful Internet Gambling Enforcement Act of 2006, transactions associated with unlawful Internet gambling are prohibited. Specifically, the Act prohibits any person engaged in the business of betting or wagering from knowingly accepting payments in connection with the participation of another person in unlawful Internet gambling. Accordingly, I must not initiate or receive wire transfers, checks, drafts, or other debits/credit transactions that are restricted by the Act. For more information, please refer to federalreserve.gov/newsevents/press/bcreg/20081112b.pdf.
- 18. Foreign Currency Transactions.** Pershing may execute foreign currency transactions as principal for my Account. Pershing's currency conversion rate will not exceed the highest interbank conversion rate identified from customary banking sources on the conversion date or the prior Business Day, increased by up to 1%, unless a particular rate is required by applicable law. Price may also increase the currency conversion rate. This conversion rate may differ from rates in effect on the date a dividend, interest payment or corporate action is credited or declared. Unless I instruct Price otherwise, Pershing may automatically convert foreign currency to or from U.S. dollars for dividends, interest or corporate actions.
- 19. Foreign Securities Trading.** Price allows me to trade on a foreign exchange. Price may act as agent for foreign security trades, which are settled in U.S. dollars as a matter of policy. Foreign account activity, including, but not limited to trades, transfers, dividends, and similar corporate actions, may be automatically converted to or from U.S. dollars. Trading in foreign securities, including direct investments in foreign markets, involves various investment risks, including foreign exchange risk (the possibility that foreign currency will fluctuate in value against the U.S. dollar), increased volatility as compared to the U.S. markets, political, economic, and social events that may influence foreign markets or affect the prices of foreign securities, lack of liquidity (foreign markets may have lower trading volumes and fewer listed companies, shorter trading hours, and restrictions on the types of securities that foreign investors may buy and sell), and less access to information about foreign companies. Emerging markets, in particular, can be subject to greater social, economic, regulatory, and political uncertainties, and can be extremely volatile. Trading in foreign securities also may be subject to various credit, settlement, operational, financial, and legal risks.
- 20. Canadian Activities.** Pershing LLC operates in Canada under an International Dealer Exception through the Ontario Securities Commission.
- 21. EU Securities Financing Regulation.** If Article 15 of the EU Securities Financing Transactions Regulation is applicable to me, I will refer to pershing.com/_global-assets/pdf/disclosures/per-eu-article-15-info-stmt.pdf for access to an information statement disclosing the risks and consequences of delivering non-cash collateral under a relevant collateral arrangement with Pershing LLC (including a margin account). This statement does not amend or supersede the express terms of any transaction or collateral arrangement, or otherwise affect your or our liabilities or obligations. Please contact your advisor if you have any questions.
- 22. Sponsorship Fees.** Third-party product and service providers (e.g., mutual fund companies, exchange-traded fund (ETF) providers, money managers, technology and business solution providers) offer marketing support in the form of sponsorship fee payments to Pershing (or third parties at Pershing's direction) in connection with educational conferences, events, seminars and workshops for broker-dealers or advisors. These payments may be for the expenses of educational materials or other conference-related expenses. For a listing of companies that pay sponsorship fees to Pershing for events, please refer to pershing.com/events/htm.

23. Alternative Investment Network Fees. Pershing may receive servicing fees from managed future funds, non-traded real estate investment trusts (REITs), private equity, private debt, business development companies (BDCs), managed future funds, hedge funds, and fund-of-funds (collectively “alternative investments”) that participate in Pershing’s Alternative Investment Network no-fee program in lieu of transaction fees and special product fee charges to Price. These fees are calculated in accordance with an asset-based formula. Pershing also receives set-up fees from alternative investment providers or broker-dealers in the form of a one-time fee to add an alternative investment to the platform. The fee is a flat fee per CUSIP and is remitted to Pershing for its work to set up the alternative investment. For additional details regarding Pershing’s Alternative Investment Network no-fee program or a listing of entities that pay fees to Pershing, please refer to www.pershing.com/alt_fees.htm.

24. Transactions in Listed Options. If I purchase options listed on the U.S. national options exchanges, I should review the Characteristics and Risks of Standardized Options disclosure published by the Options Clearing Corporation (OCC). I may obtain a copy of the options disclosure document from Price or by visiting the OCC website at optionsclearing.com/about/publications/character-risks.jsp.

25. Unit Investment Trust (UIT) Payments. When Pershing acts upon the instructions of Price to execute the purchase of a UIT, Pershing may receive a payment based on the volume of sales processed by Pershing. Price may receive a monetary concession for the sale of the UIT to me. Such payments are disclosed in the applicable UIT prospectus. Additional information regarding such payment is available at www.pershing.com/UIT_fees.html.

26. Auction Rate Securities Payments. Pershing may receive payments from the distribution agent for trades in municipal auction rate securities and closed-end fund/preferred auction rate securities executed by Pershing upon Price’s instruction. These payments are not charged to or paid by me. Additional information regarding such payments is available at www.pershing.com/ARS_fees.html.

27. Pershing’s Impartial Lottery Process: Partial Calls. Information about Pershing’s impartial lottery process can be found on pershing.com/lottery.htm. You may also request a printed copy of this information by calling (888) 367-2536, option 3, then option 5. When a security is subject to a partial redemption, pursuant to FINRA Rule 4340, Pershing must have procedures in place that are designed to treat clients fairly in accordance with an impartial lottery process.

When an issuer initiates a partial call of securities, the depository holding such securities (typically, the Depository Trust and Clearing Corporation, or DTCC) conducts an impartial, computerized lottery using an incremental random number technique to determine the allocation of called securities to participants for which it holds securities on deposit (including Pershing). Because DTCC’s lottery is random and impartial, participants may or may not receive an allocation of securities selected for redemption.

When Pershing is notified that it received an allocation of called securities, Pershing conducts a similar, computer-generated random lottery. The lottery determines the accounts that will be selected and the number of securities in the account that will be redeemed. Allocations are based on the number of trading units held in the account. The probability of any trading unit held by an account being selected as called in a partial call is proportional to the total number of trading units held through Pershing.

Once the lottery is complete, Pershing notifies introducing broker-dealers whose introduced accounts have received an allocation. Securities registered in my name, either in transit or held in custody, are excluded from the Pershing lottery process.

Pershing initiates the lottery process by identifying the accounts holding the called security, the total par value of the called securities held, and the trading unit of the security.

Example (unit of trade = \$25,000):

Client Account	Par Value	Number of Trading Units
ABC-123234	\$100,000	4
DEF-325465	\$75,000	3
EDR-567433	\$150,000	6
EGT-876574	\$50,000	2
EGT-888345	\$25,000	1
FRT-435234	\$25,000	1
FRT-658797	\$75,000	3

In brief, the allocation process involves the following steps:

- The number of trading units held in each account is identified.
- A sequential number is assigned to each trading unit (e.g., account EDR-567433 would be assigned six numbers).

- A random number is generated that will result in one of these trading units being the first unit in the selection process.
- Thereafter, the trading units participating in the allocation are based on an incremental random number technique until the number of trading units allocated to Pershing is exhausted.

Additional Information:

- The allocation of called securities is not made on a pro-rata basis. Therefore, it is possible that a client may receive a full or partial redemption of shares held. Conversely, it is also possible that a client may not have any securities selected for redemption at all.
- When a partial call is deemed favorable to the holders of the called security, Pershing will exclude certain accounts from the lottery. Excluded accounts will include Pershing's proprietary and employee accounts, as well as proprietary and employee accounts of introducing broker-dealers (if Pershing carries and clears those accounts). No allocation will be made to these proprietary and employee accounts until all other client positions at Pershing in such securities have been called. When a partial call is deemed unfavorable to holders of the called security, Pershing will not exclude any accounts from the lottery.
- If the partial call is made at a price above the current market price as captured in Pershing's price reporting system, Pershing will generally categorize the partial call as one that is favorable to the holders of such security. If the partial call is made at a price that is equal to or below the current market price of the security as captured in Pershing's price reporting system, Pershing will generally categorize that call as one that is unfavorable to holders of that security.
- Clients have the right to withdraw uncalled, fully paid securities from Pershing at any time prior to the cutoff date and time established by the issuer, transfer agent and/or depository with respect to the partial call. Clients also have the right to withdraw excess margin securities, provided that the client account is not subject to restriction under Regulation T or that such withdrawal will not cause an under-margined condition.

28. Estimated Annual Income and Estimated Yield. The following disclosure pertains to estimated annual income (EAI) and estimated current yield (ECY) figures displayed on brokerage account statements. The EAI and ECY figures are estimates and for informational purposes only. These figures are not considered to be a forecast or guarantee of future results. These figures are computed using information from providers believed to be reliable; however, no assurance can be made as to the accuracy. Since interest and dividend rates are subject to change at any time, and may be affected by current and future economic, political and business conditions, they should not be relied on for making investment, trading or tax decisions. These figures assume that the position quantities, interest and dividend rates, and prices remain constant. A capital gain or return of principal may be included in the figures for certain securities, thereby overstating them.

The EAI figure for U.S. government, corporate and municipal securities is computed by multiplying the coupon rate by the quantity of the security and then dividing that figure by 100. The resulting figure is reflected on the brokerage account statement in the EAI field.

The EAI for equity, mutual fund, unit investment trust and exchange-traded fund securities is computed using either a historical methodology (HM) or projected methodology (PM), depending on the information from the issuer. The PM annualizes the latest regular cash dividend. The HM accumulates the regular cash dividends over the past twelve months. If there is less than one year of dividend history, the accumulated dividends are annualized. The EAI for preferred securities is computed using the PM. The HM or PM figure, whichever is calculated, is then multiplied by the quantity of the security and the resulting figure is reflected on the brokerage account statement in the EAI field.

The following are important caveats to the HM figure and PM figure.

- The figure is denominated in the same currency as the dividend announcement.
- The figure does not contemplate special or extra dividends.
- When a security pays its first dividend with no specificity as to dividend frequency, the initial dividend will be the reported figure.
- If a security announces a stock split and does not announce a new dividend rate, the figure will be adjusted on the ex-distribution/dividend date.
- For a called security, the figure will remain unchanged until the payment date, at which point it will revert to zero.
- The figure for Canadian securities is calculated the same way as for U.S. securities.
- The figure for mutual funds only includes dividends treated as income.
- The figure will be zero under the following scenarios: a security that has only paid capital gains during the preceding year; a security that has only had stock splits, stock (not cash) dividends or reverse stock splits during the preceding

year; a security other than an open-end mutual fund (excluding a money market fund), ADR preferred, or exchange-traded fund which rescinds or omits a dividend payment; and a security from an issuer which is in arrears and uncertain about its ability to make a dividend payment.

The ECI figure is computed by dividing the EAI figure by the current market price of the security, which may be higher or lower than the purchase price, and then the figure is multiplied by 100. The resulting figure is reflected on the brokerage account statement in the ECI field. With specific regard to a fixed income security, the initial purchase confirmation oftentimes reflects yield to maturity, yield to call and/or yield to worst figures which are more relevant figures from the point of purchase.

29. Control Relationship Disclosure. Price is a subsidiary of T. Rowe Price Associates, which is a subsidiary of and controlled by T. Rowe Price Group, Inc., a publicly traded company (TROW).

30. No-Transaction-Fee Mutual Funds. I understand that Price is able to offer certain non-T. Rowe Price mutual funds without transaction fees because the fund companies or their distributors compensate Pershing and Price for providing certain shareholder services to its customers, such as transaction and dividend processing, delivery of account statements and confirmations, shareholder tax reporting, and responding to routine shareholder inquiries. The compensation received by Pershing and Price is based upon a percentage of the total assets invested by its customers in such non-Price Funds. Fund companies may compensate Pershing and Price for the aforementioned shareholder services through an administrative service fee, 12b-1 fee, or other shareholder service fee. Prospectuses for the mutual funds will be provided upon execution of a purchase order. Additional copies are available upon request to Price. I understand that it is my responsibility to read and understand the terms and conditions in the prospectus, including fees and charges that may apply, before placing mutual fund orders with Price. I also understand that shares in these non-Price Funds may be purchased at a lower minimum investment from the fund itself or its principal distributor. In the event that a fund is no longer a no-transaction-fee fund, I may be subject to transaction fees on future transactions.

31. Important Information Regarding Money Market Mutual Funds. Effective October 14, 2016, the SEC requires all non-government money market mutual funds that operate at a Net Asset Value of \$1.00 per share to adopt a “liquidity fees and redemption gates” regime. The regulation permits the board of directors of these non-government money market mutual funds to implement fees or gates if they determine it is in the best interest of shareholders to do so with the intent of protecting shareholders’ value in the fund in the event of heavy redemption activity during periods of market stress. A liquidity fee is a fee (up to a maximum of 2%) on redemptions and a gate is a restriction on any redemption from a fund (up to a maximum of 10 business days). In the event a fee or gate is implemented by a fund’s board, Pershing will be required to take steps to implement protocols to comply.

If a fee was implemented pursuant to the regulation, it would result in a fee being charged for any redemption processed from that money market mutual fund. If a gate were implemented, it would mean the balance held in that fund would not be available to redeem until the expiration of the redemption gate period. It is important to note that both fees and gates may apply to money market funds available as a part of the sweep program during periods of market stress. In addition, while the regulation does not mandate these requirements for government funds, government funds may voluntarily impose fees and gates in times of stress, if permissible under the fund’s prospectus and if determined by the board to be in the best interest of shareholders. Some issuers have elected to restrict the use of liquidity fees and redemption gates in their government funds and have updated fund prospectuses accordingly. Carefully review the prospectus of a specific money market mutual fund prior to any purchase for additional information.

32. Mutual Fund Disclosure

Sales Charges, Breakpoints, Fees and Revenue Sharing Relating to Mutual Funds

Before investing in mutual funds, it is important that I understand the sales charges, expenses, and management fees that I will be charged as well as the breakpoint discounts to which I may be entitled. Understanding these charges and breakpoint discounts will assist me in identifying the best investment for my particular needs and may help me to reduce the cost of my investment. This section provides general background information about these charges and discounts; however, sales charges, expenses, management fees, and breakpoint discounts vary from mutual fund to mutual fund. Therefore, I should discuss these matters with Price and review each mutual fund’s prospectus and statement of additional information (which are available from Price) to obtain the specific information regarding the charges and breakpoint discounts associated with a particular mutual fund.

Mutual Fund Sales Charges

Investors who purchase mutual funds must make certain choices, including which funds to purchase and which share class is most advantageous in light of their specific investing needs. Each mutual fund has a specified investment strategy. I should consider whether the mutual fund's investment strategy is compatible with my investment objectives. Additionally, many mutual funds offer different share classes. Although each share class represents a similar interest in the mutual fund's portfolio, the mutual fund will charge me different fees and expenses depending upon my choice of share class. As a general rule, Class A shares carry a front-end sales charge or "load" that is deducted from my investment at the time I buy the fund shares. This sales charge is a percentage of my total purchase. As explained below, many mutual funds offer volume discounts to the front-end sales charge assessed on Class A shares at certain predetermined levels of investment, which are called breakpoint discounts. In contrast, Class B and Class C shares usually do not carry any front-end sales charges. Instead, investors who purchase Class B or Class C shares pay asset-based sales charges, which may be higher or lower than the charges associated with Class A shares. Investors who purchase Class B or Class C shares also may be required to pay a sales charge known as a "contingent deferred" sales charge when they sell their shares, depending upon the rules of the particular mutual fund. This is known as a back-end sales charge or "load."

Mutual Fund Breakpoint Discounts

Many mutual funds offer investors a variety of ways to qualify for breakpoint discounts on the sales charge associated with the purchase of Class A shares. In general, most mutual funds provide breakpoint discounts to investors who make large purchases at one time. The extent of the discount depends upon the size of the purchase. Generally, as the amount of the purchase increases, the percentage used to determine the sales load decreases. The entire sales charge may be waived for investors who make very large purchases of Class A shares. Mutual fund prospectuses contain tables that illustrate the available breakpoint discounts and the investment levels at which breakpoint discounts apply. Additionally, many mutual funds allow investors to qualify for breakpoint discounts based upon current holdings from prior purchases through Rights of Accumulation (ROA) and from future purchases based upon a Letter of Intent (LOI). Mutual funds have different rules regarding the availability of ROA and LOI. Therefore, I should discuss these matters with Price and review the mutual fund's prospectus and statement of additional information to determine the specific terms upon which a mutual fund offers ROAs or LOIs.

Rights of Accumulation—Many mutual funds allow investors to include the value of previous purchases of the same fund, or another fund within the same fund family, with the value of the current purchase to qualify for breakpoint discounts. Moreover, mutual funds may allow investors to count existing holdings in multiple accounts, such as individual retirement accounts (IRAs) or accounts at other firms, to qualify for breakpoint discounts. Therefore, if I have accounts at other firms and wish to take advantage of the balances in those accounts to qualify for a breakpoint discount, I must advise Price about those balances. I may need to provide documentation if I wish to rely upon balances at another firm.

In addition, many mutual funds allow investors to count the value of holdings in accounts of certain related parties, such as spouses or children, to qualify for breakpoint discounts. Each mutual fund has different rules that govern when relatives may rely upon each other's holdings to qualify for breakpoint discounts. I should consult with Price and review the mutual fund's prospectus or statement of additional information to determine what these rules are for the fund family in which I am investing. If I wish to rely upon the holdings of related parties to qualify for a breakpoint discount, I should advise Price about these accounts. I may need to provide documentation to Price if I wish to rely upon balances in accounts at another firm. Mutual funds also follow different rules to determine the value of existing holdings. Some funds use the current net asset value (NAV) of existing investments in determining whether an investor qualifies for a breakpoint discount. However, a small number of funds use the historical cost, which is the cost of the initial purchase, to determine eligibility for breakpoint discounts. If the mutual fund uses historical costs, I may need to provide account records, such as confirmation statements or monthly statements, to qualify for a breakpoint discount based upon previous purchases. I should consult with Price and review the mutual fund's prospectus and statement of additional information to determine whether the mutual fund uses either NAV or historical costs to determine breakpoint eligibility.

Letter of Intent—Many mutual funds allow investors to qualify for breakpoint discounts by signing an LOI, which commits the investor to purchase a specified amount of Class A shares within a defined period of time, usually 13 months. For instance, if an investor plans to purchase \$50,000 worth of Class A shares over a period of 13 months, but each individual purchase would not qualify for a breakpoint discount, the investor could sign an LOI at the time of the first purchase and receive the breakpoint discount associated with a \$50,000 investment on the first and all subsequent purchases. Additionally, some funds offer retroactive LOIs that allow investors to rely upon purchases in the recent past to qualify for a breakpoint discount. However, if an investor fails to invest the amount required by the LOI, the fund is entitled to retroactively deduct the correct sales charges based upon the amount that the investor actually invested. If I intend to make several purchases

within a 13-month period, I should consult with Price and the mutual fund prospectus to determine if it would be beneficial for me to sign an LOI. As I can see, understanding the availability of breakpoint discounts is important because it may allow me to purchase Class A shares at a lower price. The availability of breakpoint discounts may save me money and may affect my decision regarding the appropriate share class in which to invest. Therefore, I should discuss the availability of breakpoint discounts with Price and carefully review the mutual fund's prospectus and its statement of additional information when choosing among the share classes offered by a mutual fund. If I wish to learn more about mutual fund share classes or mutual fund breakpoints, I also can review the investor alerts that are available on the FINRA® website at finra.org/Investors/ProtectYourself/InvestorAlerts/MutualFunds/index.htm.

Mutual Fund Fees and Revenue Sharing

Pershing may receive servicing fees from mutual funds that participate in Pershing's mutual fund no-transaction-fee program in lieu of clearance charges assessed to Price. Participation by Price in this program is optional, and Price may share with Pershing in such fees. These fees may be considered revenue sharing, are a significant source of revenue for Pershing, and may be a significant source of revenue for Price. These fees are typically paid in accordance with an asset-based formula.

Pershing also receives operational reimbursements from mutual funds in the form of networking or omnibus processing fees. These reimbursements are based on a flat fee per holding, or a percentage of assets are remitted to Pershing for its work on behalf of the funds. This work may include, but is not limited to, subaccounting services, dividend calculation and posting, accounting and reconciliation, client confirmation and statement preparation and mailing, and tax statement preparation and mailing. These fees are a significant source of revenue for Pershing. For additional details regarding Pershing's mutual fund no-transaction-fee program or for a listing of funds that pay Pershing networking or omnibus fees, please refer to pershing.com/mutual_fund.htm. Pershing also receives distribution fees in the form of 12(b)-1 fees, which may also be shared.

33. Dividend Reinvestment Service Disclosure

Summary

The T. Rowe Price Brokerage Dividend Reinvestment Service is made available to my account through Pershing LLC (Pershing), a BNY Mellon company. Pershing is carrying my account as a clearing broker by arrangement with T. Rowe Price Brokerage. If I elect to participate, T. Rowe Price Brokerage will automatically reinvest my cash dividends (and certain other cash distributions) paid on eligible securities in my account in additional shares of the same securities. I may request automatic dividend reinvestment for all eligible securities in my account, or I may select individual stocks for dividend reinvestment. Pershing will act on my behalf on instruction from T. Rowe Price Brokerage. This service is provided to customers free of charge. Although Pershing or Price may in the future charge a fee.

1. Provision of Dividend Reinvestment Services—My enrollment in the Dividend Reinvestment Service becomes effective on the first business day after I elect to enroll and T. Rowe Price receives my account application. When my enrollment becomes effective, I agree to be bound by these Dividend Reinvestment Service Terms and Conditions as well as any other Account Agreements that I have with T. Rowe Price Brokerage.

I may choose the Dividend Reinvestment Service for all eligible securities in my account, or I may select individual securities for automatic dividend reinvestment by calling T. Rowe Price Brokerage. If I request automatic dividend reinvestment for all eligible securities in my account, this standing instruction will apply to all present and future eligible securities. If, however, my original instructions were to reinvest dividends on specific eligible securities, and I purchase or deposit a new stock(s) into my account, I must give new instructions to enroll the stock(s) in the Dividend Reinvestment Service or dividends will not be reinvested. Any stock(s) not specified for dividend reinvestment will not be enrolled in the service. To add or remove the service with respect to securities in my account, I must notify a registered representative at least five business days prior to the day on which dividends or other eligible cash distributions are payable for those securities. Dividends are reinvested on all securities I have selected that I own on the record date for determining shareholders eligible to receive dividends, as long as I still own any whole shares of such securities on the dividend payable date. Dividend reinvestment does not assure profits on my investments and does not protect against loss in declining markets.

2. Eligible Securities—Most securities listed on the New York Stock Exchange or the American Stock Exchange, or traded on the National Association of Securities Dealers Automated Quotation System (Nasdaq) are eligible for the Dividend Reinvestment Service. Nonlisted foreign securities, nonpublicly traded limited partnerships, preferred issues, and short positions are not eligible. However, Pershing reserves the right to make certain currently non-eligible securities eligible in the future without prior notification.

3. **Eligible Cash Distribution for Reinvestment**—Most cash distributions on eligible securities (eligible cash distributions) selected for participation in the Dividend Reinvestment Service may be reinvested, including ordinary dividends and capital gain distributions. Cash-in-lieu payments and certain special dividend payments, however, cannot automatically be reinvested. I may not combine eligible cash distributions with any funds I deposit into my account to make automatic reinvestment purchases.
4. **Dividend Reinvestment Transactions in Eligible Securities**—If the record date for the dividend is at least five business days prior to the dividend pay date, on the payable date my account will be credited the amount of the cash distribution. This amount will then be debited from my account, and the appropriate number of full and fractional shares will be credited to my account. However, if the record date for the dividend is less than four business days prior to the dividend pay date, Pershing will attempt to purchase the reinvestment shares on the first trading day after the record date. On the settlement date, my account will be credited the amount of the cash distribution, debited the amount equal to the cost of the whole and fractional shares purchased, and subsequently allocated the appropriate number of reinvested shares. If shares cannot be purchased after three attempts, I will receive a cash distribution. I will not receive a confirmation for these transactions. I will be able to review all of the information about each transaction that would normally appear on my confirmation, along with my current reinvestment instructions, on my Brokerage statement. I may also contact T. Rowe Price on the payable date (or any date thereafter) for current information regarding the transactions.

The shares are purchased through open market purchases prior to the payable date. Pershing will calculate the number of shares to be purchased for the selected security by determining the cash distribution to be received by each individual requesting reinvestment. Pershing will then combine my cash dividend with other individuals requesting reinvestment in the same underlying security and purchase the amount of whole and fractional shares required to satisfy each individual. If the transaction cannot be completed in one trade, I will receive the average weighted price paid by Pershing. When I sell my entire position, I will receive the same price on my fractional portion as I did for my whole share portion. For transfers, only the whole share portion will be moved, and I will receive the previous business day's closing price for the fraction. Pershing may purchase the securities from Pershing LLC. Pershing may, without prior notification, choose to make a security eligible or non-eligible.

5. **Partial Shares**—Automatic reinvestment of my eligible cash distributions may give me an interest in partial shares, which T. Rowe Price or Pershing will calculate to five decimal places (only three decimal places will show on statements). I will be entitled to receive dividend payments proportionate to my partial shareholdings. If an account is transferred, if a stock undergoes a reorganization, or if stock certificates are ordered out of an account, partial share positions, which cannot be transferred, reorganized, or issued in certificate form, will be liquidated at prevailing market prices. No commission will be charged for these transactions. Timing is subject to T. Rowe Price or Pershing discretion. I will also be entitled to receive proxy voting materials and voting rights proportionate to my partial shares. In mandatory corporate reorganizations, my partial shares will be handled according to the terms of the particular reorganization. In voluntary reorganizations, my instructions will be applied only to my whole shares. In the event of a rights offering to holders of an eligible security, T. Rowe Price or Pershing will cause the rights accruing to all partial shares of that security to be sold.
6. **Confirmation and Statements**—All transactions made through the Dividend Reinvestment Service will be confirmed on my regular account statement. Pershing acts as agent in all dividend reinvestment transactions. I may obtain immediate information by calling a registered representative of T. Rowe Price Brokerage.

34. Brokerage Advantage Account Features. The features outlined below apply only to Brokerage Advantage Accounts. For information regarding similar features that may be available with a Brokerage account, please reference the prospectus of the Price Fund you chose as your Money Market Sweep Fund.

ACH Transactions. I understand that there are several types of electronic transactions I can authorize that are handled through the Automated Clearing House (ACH) network. The primary types of ACH transactions permitted for my Account are (a) purchases and redemptions I authorize Price to make between my Account and my bank account in amounts between \$100 to \$100,000; (b) deposits to my Account that I authorize a third party to make, such as payroll deposits by my employer; (c) recurring or one-time debits that I authorize another financial services company to make in order to transfer funds from my Account to an account I have at the other financial services company; (d) recurring payments at substantially regular intervals from my Account that I authorize a third party to initiate, such as to pay my mortgage or other bills; (e) one-time payments from my Account that I authorize a third party to initiate in accordance with the ACH rules for prearranged payment and deposit entries; (f) one-time payments from my Account that I authorize over the telephone for a merchant or other third party to make; and (g) recurring or one-time payments from my Account that I authorize over the Internet for a merchant or other third party to make. In addition to the terms of the Account Agreements, the rules of the ACH network will apply to all ACH transactions. Please see the Checkwriting section for certain types of ACH transactions involving checks that are not permitted.

Wire. I understand that I can conduct electronic transactions via bank wire. I acknowledge that there is currently a \$15 fee for wire redemptions from my Account and that my bank may charge for incoming or outgoing wire transfers regardless of size.

Sale (Redemption) Conditions. I understand that if I request a redemption of funds that I just deposited via check or ACH transfer, Price will generally delay sending me such funds for up to seven business days to allow the check or transfer to clear. If Price receives a check drawn against my Account during the clearing period and additional funds are not available, the check will be returned marked "uncollected." Other types of redemptions, such as an ACH debit initiated by a third party, also may be rejected and returned unpaid under these circumstances. (These holding periods do not apply to purchases paid for by bank wire or automatic purchases through your paycheck).

My redemption could also be delayed if there are outstanding authorizations on my Visa Gold ATM Debit/Check Card. If I request a redemption and there are authorizations pending, Price will process my redemption to the extent that funds are available in my Account.

- Price will redeem shares from my Account to cover transactions in the following order, to the extent applicable to my Account:
- Visa Gold ATM Debit/Check Card transactions (including ATM withdrawals, merchandise purchases, and cash advances)
- Brokerage transactions occurring prior to presentments
- Checkwriting services on money market sweep accounts
- ACH transactions not initiated by Price

Between Cash and Margin. For all Brokerage Advantage Accounts that maintain a margin account and utilize the cash management features, Pershing will, on a weekly basis, transfer fully paid marginable securities held in my cash account to my margin account to maximize my available secured credit line.

Checkwriting. I understand that I will be permitted to write an unlimited number of checks against my Account balance and that funds will be drawn in the following order: (1) against any free credit balance in my Brokerage Advantage Account, (2) against the balance in my Money Market Sweep Fund, then (3) against the available free cash that I may borrow if I have a margin account. I understand that if margin free cash is used, I will be subject to margin interest and maintenance calls as disclosed in the Margin Agreement. There is no minimum check amount requirement, and canceled checks will not be returned to me by the bank. The check number, amount of each check, payee, and date posted will normally appear on my monthly statement.

Sometimes a merchant or other third party gives notice that information from a check I wish to write at a cash register or that I may send in for a bill payment may be used to make an electronic fund transfer instead, but certain types of checks, including those for my Account, are not eligible to be converted to electronic debits under the ACH network rules. I understand that I should not use my checks in these cases unless the third party offers an alternative that will not result in the check being converted to an electronic debit.

I understand that the use of my card (if applicable) is subject to the Agreement that was sent to me with my card, as amended from time to time (Card Agreement). I can call 1-800-222-7002 for a current copy of the Card Agreement. As to issues or questions involving my card or card usage, in the event of a conflict between these Account Agreements and the Card Agreement, the Card Agreement will control to the extent of the conflict.

Transactions Subject to the Electronic Funds Transfer Act. To the extent transactions for my Account are subject to the Electronic Funds Transfer Act (EFTA) and the regulations under the EFTA, the following provisions also apply:

Types of Electronic Funds Transfers. I can authorize a third party, such as a merchant or other company, to (a) initiate recurring payments at substantially regular intervals from my Account, such as to pay my mortgage or other bills; (b) initiate a one-time payment from my Account in accordance with the ACH rules for prearranged payment and deposit entries; (c) initiate a one-time payment from my Account for a transaction I am making by telephone; or (d) initiate recurring or one-time payments from my Account for a transaction I am making over the Internet (collectively, Transactions). The other types of ACH transactions I can make are listed in the section titled "ACH Transactions," but generally they are not subject to the EFTA.

Business Days. The term "Business Day" means Monday through Friday, excluding federal holidays. Although Price's offices may be open on certain federal holidays, these days are not considered Business Days for purposes relating to Transactions.

Periodic Statements. Price will send me an account statement every month in which a Transaction was made. In any case, I will get an account statement at least quarterly.

Recurring Payments—Stopping Payment; Notice of Varying Amounts. If I have authorized a third party to make recurring payment Transactions from my Account, I can stop any of these payments by calling or writing Price in time for Price to receive my request three Business Days or more before the payment is scheduled to be made. (See the following section titled “In Case of Errors or Questions About Transactions” for Price’s telephone number and address). I must tell Price the exact amount of the payment I want stopped and any other identifying information requested. If I call, Price may also require me to put my request in writing and get it to Price within 14 days after my call. If I order Price to stop one of these payments three Business Days or more before it is scheduled to be made and Price does not do so, Price will be liable for my losses or damages.

If these regular payments may vary in amount, the person I am going to pay should tell me, 10 days before each payment, when it will be made and how much it will be.

Liability for Failure to Complete Transactions. If Price does not complete a Transaction to or from my Account on time or in the correct amount according to the Account Agreements, Price will be liable for my losses or damages. However, there are some exceptions. Price will not be liable if:

- Through no fault of Price, I do not have a sufficient available balance to make the Transaction;
- Any computer or telephone system was not working properly and I knew about the breakdown when I started the Transaction;
- My Account is frozen (for example, because of a court order or other similar reason) and Price is not permitted to make the Transaction;
- Circumstances beyond Price’s control (such as fire or flood) prevent the Transaction, despite the reasonable precautions it has taken;
- I failed to use the computer or telephone system in accordance with instructions;
- Price has limited or refused to complete Transactions for security reasons; or
- Price has reason to believe that the requested Transaction is unauthorized.

There may be additional exceptions stated elsewhere in the Account Agreements or as I have been otherwise notified. Price will not be responsible for any person’s actions in refusing to honor or accept Transactions I have requested. In any case, Price will be liable only for actual proven damages if the failure to make the Transaction resulted from a bona fide error by Price despite its procedures to avoid such errors.

Confidentiality. Generally, Price will keep information concerning my Account and Transactions confidential. Price may reveal information to third parties about my Account and my Transactions (a) where it is necessary for completing my Transaction; (b) in order to verify the existence and condition of my Account for a third party, such as a credit bureau or merchant; (c) in order to comply with laws or with orders of subpoenas of government agencies or courts; (d) if I give Price written permission; (e) to other persons and entities in order to resolve problems or disputes arising from Transactions; (f) as otherwise stated in the Account Agreements; or (g) in the circumstances contemplated by Price’s Privacy Policy, as furnished to Price separately and as updated or amended from time to time.

35. Regulation E. Regulation E of the Consumer Financial Protection Bureau establishes disclosures regarding electronic transfers. In addition to the disclosures in this section, I should review the account terms and conditions and other disclosures regarding electronic transfers that are provided to me by Price. Please note that this disclosure section is not applicable to international remittance transfers. I will contact Price in the event that I have any questions regarding international remittance transfers you have requested.

Electronic Transfers

Electronic transfers include:

- Direct Deposits—I provide my checking account information to a company (such as employer, Social Security Administration) and the company electronically sends deposits to my checking account, which credits the brokerage account.
- Authorized Debits—I provide my checking account information to a company (such as mortgage, utility) and the company electronically sends debits to my checking account, which debits the brokerage account.
- Debit Card Transactions—Any merchant purchase, automatic teller machine (ATM) withdrawal or cash advance done with the debit card issued from the account.

- **Electronic Check Conversion**—I authorize a merchant or other payee to make a one-time electronic payment from my checking account using information from my check to pay for purchases or to pay bills.

If I have any questions regarding electronic transfers, I can call Pershing's Asset Management Account Department at (800) 547-7008 or at (201) 413-4624.

I may also write to Pershing at:

Pershing LLC
Asset Management Account Department One Pershing Plaza, Fifth Floor
Jersey City, NJ 07399

Contact Pershing immediately if I think your statement or transfer receipt is incorrect, or if I need more information about a particular transfer. Pershing must hear from me within 60 days of the date of the first statement on which the transfer in question appeared. When contacting Pershing, please provide:

My name
Account number
Dollar amount of the transfer
Description of the transfer
Explanation indicating why I believe there is an error or why I need more information

If I notify Pershing verbally, it may request that I submit my inquiry in writing. If not received within 10 business days of Pershing's request, Pershing may not credit my account.

Pershing will inform me of the results of Pershing's investigation within 10 business days after it receives my inquiry and it will promptly correct any error.

If Pershing needs more time to investigate my inquiry, Pershing will credit my account in the amount of the transfer in question so that I have use of the funds during Pershing's investigation, which may take up to 45 days to complete.

Pershing will inform me of the results within three business days after completing its investigation. If Pershing decides that there was no error, it will send me a written explanation. I may request copies of the documents that Pershing uses in its investigation. If I have any questions, I can contact Price. I may also contact Pershing's Asset Management Account Department at (800) 547-7008 or (201) 413-4624, or by fax at (201) 413-5304.

36. Credit and Margin Disclosures

Cash Accounts—At Pershing's discretion, cash accounts may be subject to interest on any debit balances (in any currency) resulting from securities purchased and not paid for by the settlement date, untimely deliver securities sold, from proceeds of sales paid prior to the settlement date, or for other charges that may be made to the Account.

Margin Accounts—Purchases of securities on credit, commonly known as margin purchases, enable me to increase the buying power of my equity and thus increase the potential for profit or loss. A portion of the purchase price is deposited when buying securities on margin, and Pershing extends credit for the remainder. This loan appears as a debit balance on my monthly account statement. Pershing charges interest on the debit balance and requires me to maintain securities or cash to repay the loan and its interest.

Interest will be charged for any credit extended to me for the purpose of buying, trading, or carrying any securities; for any cash withdrawals made against the collateral of securities; or for payment made in advance of settlement on the sale of securities (from date of payment until settlement date). If any other charge is made to the Account for any reason, interest may be charged on the resulting debit balances. Interest I pay on the loan may be shared between Price and Pershing. If I have a margin account, pursuant to the Margin Agreement with Pershing, securities not fully paid for may be used by Pershing or loaned out to others, and as permitted by law, certain securities in my Account may be used for, among other things, settling short sales and lending the securities. As a result, Price and Pershing may receive compensation therewith. Further, fully paid-for securities held in a cash account (unless otherwise agreed to in a separate written Agreement) and fully paid-for securities held in a margin account in which there is no debit balance are not loaned.

In locating "hard to borrow" securities to support my short sales, I may be charged a fee. The rate may also include a charge above the fee Pershing assesses. This additional fee represents work done by Price on my behalf in connection with these transactions.

Interest Rates—Interest charged on any debit balances in cash accounts or credit extended in margin accounts may be up to 3% above the Pershing Base Lending Rate for that currency. The Pershing Base Lending Rate for each currency will be set with reference to commercially recognized interest rates, industry conditions relating to the extension of credit, and general credit market conditions. For a loan in a currency other than U.S. dollars, the Pershing Base Lending Rate will be set based on the above referenced criteria in the country whose currency is the basis of the loan and can change without prior notice. When the Pershing Base Lending Rate for a particular currency changes during an interest period, interest will be calculated according to the number of days each rate is in effect during that period. If the rate of interest charged to me is changed for any reason other than stated above, I will be notified at least 30 days in advance. In compliance with the rules governing the protection of customer funds, Pershing earns money by investing my cash awaiting reinvestment or by lending it to other customers. In some cases, a portion of the interest earned on money credit balances held by Pershing may be shared with Price. Additionally, a portion of the interest paid to Pershing (for example, cash due interest) may be shared with Price.

Interest Period—The interest period begins on the 20th of each month and ends on the 19th of the following month. Accordingly, the interest charges for the period as shown on my monthly statement are based only on the daily net debit and credit balances for the interest period.

Method of Computation—At the close of each interest period during which credit was extended to me, an interest charge is computed (in each applicable currency) by multiplying the average daily debit balance by the applicable schedule rate and by the number of days during which a debit balance was outstanding and then dividing by 360. If there has been a change in the Pershing Base Lending Rate, separate calculations will be made computing the number of days within the interest period at each rate. If credit extended to my Account is not paid, the interest charge at the close of the period is added to the opening debit balance for that currency in the next period.

With the exception of credit balances in my short account, all other credit and debit balances in the same currency will be combined daily. Interest will be charged on the resulting average daily net debit balances for that currency for the period. Credit balances in one currency will not be combined or netted with debit balances in a different currency. If there is a debit in my cash account and I hold a margin account, interest will be calculated on the combined debit balance and charged to my margin account. Any credit balance in my short account is disregarded because such credit collateralizes the stock borrowed for delivery against the short sale. Such credit is disregarded even if I should be long the same position in my margin account (for instance, short sale against the box).

If the security that I sold short (or sold short against the box) appreciates in market price over the selling price, interest will be charged (in the appropriate currency) on the appreciation in value. Conversely, if the security that I sold short depreciates in market price, the interest charged will be reduced since my average debit balance will decline. This practice is known as “marking to market.” Each week, a closing price is used to determine any appreciation or depreciation of the security sold short. If my Account is short shares of stock on the record date of a dividend or other distribution (however such short position occurs), my Account will be charged the amount of the dividend or other distribution on the following business day.

General Margin Policies—The amount of credit that Pershing may extend and the terms of such extension are governed by rules of the Federal Reserve Board and FINRA. Within the guidelines of those rules and subject to adjustment required by changes in those rules and Pershing’s business judgment, Pershing’s margin account policies are summarized below:

- Pershing may require the deposit of additional acceptable collateral at any time.
- Margin account equity is the current market value of securities and cash less the amount owed Pershing for credit extended at its discretion.
- It is Pershing’s general policy to require margin account holders to maintain a certain level of regarding common stock: 30% of the current market value or \$3 per share, whichever is greater.
- Any security valued at less than \$5 per share may not be purchased in a margin account.
- From time to time, Pershing may deem certain securities ineligible for margin credit.

For information with respect to general margin maintenance policy for municipal bonds, corporate bonds, U. S. Treasury notes and bonds, and other securities, as well as information about the eligibility of particular securities for margin credit, please contact Price.

Notwithstanding the above general policies, Pershing reserves the right, at its discretion, to require the deposit of additional collateral and to set required margin at a higher or lower amount with respect to particular accounts or classes of accounts as it deems necessary. In making this determination, Pershing may take into account various factors, including but not limited to:

- Issues as to my securities, such as, among others, the liquidity of a position and concentration of securities in an account
- Considerations as to my status, including but not limited to a decline in creditworthiness
- The size of the account
- The general condition of the market
- Considerations as to the ability of Pershing to obtain financing
- Regulatory interpretations and guidelines.

If I fail to meet a margin call in a timely manner, some or all of my positions may be liquidated.

Deposits of Collateral, Lien on Accounts, and Liquidation—In the event that additional collateral is requested, I may deposit funds or acceptable securities into my margin account. If satisfactory collateral is not promptly deposited after a request is made, Pershing or Price may liquidate securities held in any of my Accounts. Pursuant to its Margin Agreement, Pershing may retain any asset held in my Accounts, including securities held for safekeeping as long as any credit extended remains outstanding.

Callable Securities—Securities held for my Account in street name, or by a securities depository, are commingled with the same securities held for Pershing's own clients and clients of other firms. My ownership of these securities is reflected in Pershing's records. I have the right at any time to require delivery of any securities that are fully paid for or are in excess of margin requirements.

The terms of many bonds allow the issuer to partially redeem or "call" the issue prior to the maturity date. Certain preferred stocks are also subject to being called by the issuer. Whenever any such security being held by Pershing is partially "called," Pershing determines the ownership of the securities to be submitted for redemption, through a random selection procedure as prescribed by FINRA Rules, without regard to unsettled sales. In the event that such securities owned by me are selected and redeemed, my Account will be credited with the proceeds.

If I do not wish to be subject to this random selection process, I must instruct Price to have Pershing deliver my securities to the transfer agent directly via Direct Registration System (DRS) or request a physical certificate issued in my name and mailed to me. There will be fees associated with the issuance of certificates or DRS positions, and not all issuers still offer certificates. To move a security, it must not have been called by the delivery date. When moving a security off the Pershing platform, it will no longer reflect on my brokerage statement. Also, the probability of one of my securities being called is the same whether they are held by me or by Pershing for me.

Miscellaneous Credits—Pershing credits Account funds that belong to me, such as dividends, interest, redemptions, and proceeds of corporate reorganizations, on the day such funds are received by Pershing. These funds come to Pershing from issuers and various intermediaries in which Pershing is a participant, such as the Depository Trust Company. Periodically, an intermediary will pass to Pershing some or all of the interest earned on funds while in the possession. To the extent Pershing receives such payments, Pershing retains them.

Price is responsible for providing me information regarding when Pershing credits my Account with funds due to me, when those funds are available to me, and/or when I begin earning interest on those funds.

Substitute Payments—As permitted under my Margin Agreement, Pershing may lend shares in my Account when my Account has a debit balance. Payment that I receive with respect to loaned securities will be reclassified as "substitute" payments. The tax consequences of substitute payments may differ from payments made directly from the security's issuer, such as qualified dividends. For instance, a qualified dividend received by an individual may be taxed at a preferential rate. If a substitute payment is received instead, the preferential rate will not apply. Individuals may also be affected if certain payments (such as exempt-interest dividends, capital gain distributions, return of capital, and foreign tax credit dividends) are reclassified as substitute payments. Corporate taxpayers could also be affected because the dividends-received deduction is not available with respect to substitute payments.

Substitute Payment Reimbursements—As permitted under my Margin Agreement, Pershing may lend shares in my account when my account has a debit balance. In the instance where my securities are on loan over an ex-dividend date, Pershing may issue a substitute payment to my Account in lieu of the dividend and, subsequently, a reimbursement to compensate me for the tax differential. A substitute payment received in lieu of a qualified dividend may be eligible for a reimbursement to the lender's account only if the Account is open on the reimbursement date. Please note that these reimbursements are (1) credited at Pershing's discretion, (2) subject to change, and (3) may be eliminated without advance notification. I understand that I should contact my tax advisor to discuss the tax treatment of substitute payments.