

Deutsche Asset
& Wealth Management
Account Agreement
Client(s)
Address
City
State

Account Title (Complete if different from the Client above)

Zip Code

Account Number(s)

IMPORTANT: PLEASE SIGN AND RETURN THIS ACCOUNT AGREEMENT

This is the account agreement (Account Agreement) between Client and Deutsche Bank Securities Inc. (referred to herein as "DBSI"). It includes the terms and conditions and is the contract that controls each brokerage account in which Client has an interest (each an "Account"). Client agrees to read this Account Agreement and the Appendix to this Account Agreement: Disclosures and Definitions ("Appendix") carefully. If Client is not willing to be bound by these terms and conditions, Client should not sign this Account Agreement. Client's signature confirms that Client has read and agrees to the terms of this Account Agreement and the Appendix annexed hereto.

I. CLIENT REPRESENTATIONS

Client certifies that all of the information provided by Client in this Account Agreement is accurate and complete and that each of the following statements is accurate as to Client and Client's Account:

- a. Where Client is a natural person, Client is of legal age;
- b. For all accounts: (a) no one except the person(s) named on the Account(s), or, if signed in a representative capacity, then no one except the beneficial owner(s), has any interest in the Account(s), (b) Client is and will remain compliant with all Applicable Laws, (c) Client is financially capable of satisfying any obligations undertaken through Client's Account(s), (d) Client acknowledges that the purchase and sale of securities entails substantial economic risk, and represents knowingly and willingly that Client can assume such risk and (e) Client has read and understands the terms set forth in this Account Agreement and those agreements or supplements incorporated by reference and understands that Client is bound by such terms;
- c. Client agrees to notify us in writing if: (a) Client is or becomes an employee, member or immediate family member of any securities exchange (or corporation of which any exchange owns a majority of the capital stock), Financial Industry Regulatory Authority, Inc. (FINRA) or of any broker-dealer, (b) Client is or becomes a senior officer or immediate family member of such a person of any bank, savings and loan institution, insurance company, investment company, investment advisory firm or institution that purchases securities, or other

employer whose consent is required to open and maintain this Account by regulation or otherwise, unless such consent has been provided to DBSI.

Client will promptly notify DBSI in writing if any of the above circumstances change.

II. TERMS AND CONDITIONS THAT APPLY TO CLIENT'S ACCOUNT(S)

The following terms and conditions govern Client's Account(s):

1. Rights of DBSI. All rights granted to DBSI under this Account Agreement are granted with the understanding that it shall be within the sole discretion of DBSI whether, and in what manner, to exercise such rights. The failure of DBSI to exercise any right granted under this Account Agreement shall not be deemed a waiver of such right or any other right granted hereunder. DBSI retains the right to delegate to its agent, including its clearing agent, Pershing LLC (Pershing), one or more of DBSI's rights or obligations under this Agreement without notice to Client.
2. Cash Account. DBSI will classify each Account as a cash brokerage account. DBSI must separately approve the opening of a margin account (Margin Account) and Client must separately sign the Margin Agreement.
3. Order Execution. Orders for the purchase or sale of assets may be routed to or executed through any exchange, market or broker that DBSI selects.
4. Rules and Regulations. All transactions in Account(s) shall be conducted in accordance with and subject to Applicable Law.

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5. Purchase of Securities. DBSI requires that cash accounts contain sufficient funds to settle a transaction, but has the right to accept an order without sufficient funds with the understanding that Client will submit payment on or before settlement date for each security purchased. DBSI retains the right to cancel or liquidate any order accepted and/or executed without prior notice to Client, if DBSI does not receive payment by settlement date. Alternatively, upon Client's failure to pay for purchased and settled securities, DBSI has the right to sell Securities and Other Property held in any of Client's Account(s), and charge to Client any loss resulting therefrom.

6. Sale of Securities. Client agrees that in a cash account: (a) Client will not sell any Security before it is paid for, (b) Client will own each security sold at the time of sale, (c) unless such security is already held in the Account, Client will promptly deliver such security thereto on or before settlement date, (d) Client will promptly make full cash payment of any amount which may become due in order to meet necessary requests for additional deposits and (e) with respect to any Securities and Other Property sold, Client will satisfy any mark to the market deficiencies. Client must affect all Short Sales in a margin account and designate these sales as "short." All other sales will be designated as "long" and will be deemed to be owned by Client. In the event that DBSI enters an order to sell Securities and Other Property that Client represents Client owns, but which are not held in the Account at the time of sale, and Client fails to make delivery by settlement date, DBSI has the right to purchase or borrow any Securities and Other Property necessary to make the required delivery. Client agrees to compensate DBSI for any loss or cost, including interest, commission or fees sustained as a result of the foregoing. DBSI charges interest on unpaid balances in cash accounts from the close of business on settlement date. See the Annual Disclosure Statement, at <http://www.pwm.db.com/americas/en/annualdisclosurestatement.html> for additional information on interest charges.

7. Restrictions on Trading. DBSI has the right to prohibit or restrict Client's ability to trade Securities and Other Property, or to substitute securities in Client's Account.

8. Restricted Securities. Client will not buy, sell or pledge any Restricted Securities without DBSI's prior written approval. Prior to placing any order for Restricted Securities subject to Rule 144 or 145 of the Securities Act of 1933, Client must identify the status of the securities and furnish DBSI with the necessary documents (including opinions of legal counsel, if requested) to obtain approval to transfer and register these securities. DBSI will not be liable for any delays in the processing of these securities or for any losses caused by these delays. DBSI has the right to

decline to accept an order for these securities until the transfer and registration of such securities has been approved.

9. Order Placement and Cancellation/Modification Requests. When Client verbally places a trade with a Client

Advisor, Client will be bound to the oral confirmation repeated back to Client, unless Client objects at the time of the order. Client understands that requests to cancel/modify an order that DBSI accepts are on a best efforts basis only.

10. Aggregation of Orders and Average Prices. Client authorizes DBSI to aggregate orders for Client Account(s) with other orders. Client recognizes that in so doing, Client may receive an average price for orders that may differ from the price(s) Client may have received had the orders not been aggregated. Client understands that this practice may also result in orders being only partially completed.

11. Transmission of Instructions. Client understands and accepts responsibility for the transmission of instructions to DBSI and will bear the risk of loss arising from the method of transmission used in the event of transmission errors, misunderstandings, impersonations, transmission by unauthorized persons, forgery or intercepts. Except in the case of gross negligence, Client agrees to release and indemnify DBSI, its affiliates, employees and directors from any and all liability arising from the execution of transactions based on such instructions.

12. Role of Certain Third Parties. DBSI engages a third-party clearing agent, Pershing. Client understands that Pershing is the custodian of Client's assets, clears and settles all transactions, and extends credit on any margin purchases, where applicable. Client further understands that Pershing may accept from DBSI, without inquiry or investigation: (i) orders for the purchase or sale of Securities and Other Property on margin or otherwise, and (ii) any other instructions concerning Account(s). Client further understands that the contract between DBSI and Pershing, and the services rendered thereunder, are not intended to create a joint venture, partnership or other form of business organization of any kind. Pershing shall not be responsible or liable to Client for any acts or omissions of DBSI or its employees. Pershing does not provide investment advice, nor offer any opinion on the suitability of any transaction or order. DBSI is not acting as the agent of Pershing. Client cannot hold Pershing, its affiliates and its officers, directors and agents liable for any trading losses that Client incurs.

13. Liens. Client hereby grants to DBSI and its Affiliates a security interest in and lien upon all Securities and Other Property in the possession or control of DBSI, any of its Affiliates or Pershing, in which Client has an interest (held individually, jointly or otherwise) (collectively all such Securities and Other Property are referred to herein as "Collateral") in order to secure any and all indebtedness or any other

obligation of Client to DBSI and its Affiliates or Pershing (collectively, all such obligations are referred to herein as the "Obligations"). Clients who are joint accountholders (Joint Accountholders) acknowledge and agree that pursuant to the lien to DBSI and Affiliates, the Collateral shall include Securities and Other Property held in the Account or any other account held by either Joint Accountholder with DBSI or its Affiliates or Pershing (whether individually, jointly or otherwise) and shall secure any and all Obligations of each Joint Accountholder to DBSI and its Affiliates or Pershing. With respect to the lien granted to DBSI and its Affiliates, DBSI (or Pershing, at DBSI's instruction) may, at any time and without prior notice, sell, transfer, release, exchange, settle or otherwise dispose of or deal with any or all such Collateral in order to satisfy any Obligations. In enforcing this lien, DBSI shall have the discretion to determine what and how much Collateral to apply for the purposes of the foregoing. Notwithstanding the foregoing, nothing herein shall be deemed to grant an interest in any Account or assets that would give rise to a prohibited transaction under Section 4975(c)(1) (B) of the Internal Revenue Code of 1986, as amended, or Section 406(a)(i)-(B) of the Employee Retirement Income Security Act of 1974, as amended. Securities and Other Property held in Client's retirement account(s) maintained by DBSI, which may include IRAs or qualified plans, are not subject to this lien and such Securities and Other Property may only be used to satisfy Client's indebtedness or other obligations related to Client's retirement account(s).

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14. Satisfaction of Indebtedness and Assignment of Rights. Client agrees to satisfy, upon demand, any indebtedness, including any interest and commission charges and to pay the reasonable costs and expenses of collection of any amount Client owes to DBSI, including reasonable attorneys' fees and court costs. Client agrees that DBSI or Pershing may execute or assign to each other or any third party any rights or obligations Client granted under this Account Agreement, including but not limited to the right to collect any Obligations, or liquidate any Securities and Other Property held in Account(s).

15. Fees. Client understands that DBSI charges an Annual Account Fee for certain accounts and may charge service fees, processing fees and/or other fees or commissions, for the transactions and other services provided, more fully described in the Annual Disclosure Statement, at <http://www.pwm.db.com/americas/en/annualdisclosurestatement.html>. Client understands that these fees will be charged to Account(s) and authorizes DBSI to deduct such fees from Client's Account(s).

16. No FDIC Insurance, Not Obligations of Any Bank. Client understands that the assets in Client's Account are subject to the risk of partial or total loss due to market fluctuations or the insolvency of the issuer(s). The assets in Client's Account (including all related cash balances and shares of any Mutual Fund) are not deposits or other obligations of DBSI, Deutsche Bank AG, Pershing or any other bank, are not guaranteed by DBSI, Deutsche Bank AG, Administrator, Bank or any other bank, and are not insured by the Federal Deposit Insurance Corporation (FDIC). Monies held in the Insured Deposit Program (IDP) may be FDIC insured while those monies are held in a depository account at a participating bank as described in the IDP Terms and Conditions. Client may from time to time be offered investment products for which DBSI or Deutsche Bank AG is an obligor. These products may be complex, may not provide for the return of the full amount of principal invested or for the payment of a fixed rate of interest (or any interest) and will not usually be covered by FDIC insurance, unless otherwise disclosed in the written offering documents for such products.

17. Cash Sweep Selection. Client agrees to contact DBSI regarding the selection of Cash Sweep Options and understands that Client's choice of Cash Sweep Options may be limited to money market mutual funds or deposit products that are unaffiliated with DBSI if Client's Account is an individual retirement account or an ERISA account, or if DBSI is acting as Client's investment adviser. Client understands that any funds Client has on deposit with the banks participating in IDP will be allocated among such banks in a manner described in the IDP Terms

and Conditions.

18. Credit Information and Investigation. Client authorizes DBSI and Pershing to obtain reports concerning Client's credit standing and business conduct at their discretion without notifying Client. Client also authorizes DBSI to share among service providers (as set forth herein) and DBSI Affiliates such credit-related and business conduct information and any other confidential information DBSI, Deutsche Bank AG and such Affiliate(s) may have about Client and Client's Account, in accordance with DBSI's Privacy Policy and Applicable Law. DBSI and Pershing will provide Client with a copy of each of their Privacy Policies shortly after execution by Client of this Agreement. Client may request a copy of Client's credit report, and upon request, DBSI will identify the name and address of the consumer reporting agency that furnished it.

19. Confirmations, Statements and Other Communications. Client agrees to notify DBSI in writing, within ten (10) days after transmittal to Client of a confirmation, of any objection Client has to any transaction in Client's Account(s). In the absence of such written notification, Client agrees that all transactions in Client's Account(s) will be final and binding. Client understands objections must be directed to the Branch Supervisor in writing, at the address on Client's account statement or confirm. For more information on how confirmations and account statements are delivered, please refer to the Appendix to this Account Agreement.

20. Recording Conversations. Client consents to DBSI recording any or all telephone calls with Client.

21. Joint Accounts.

a. Unless Clients specify "tenants in common" or "community property," Clients authorize DBSI to designate a joint account as "joint tenants with right of survivorship," or as "tenants by the entirety" if Clients are married and reside in a state that recognizes said designation for personal property. Clients agree that joint accounts will be carried by DBSI on Pershing's books in the form reflected by the Account name appearing on the account statement. In the event that the Account is a joint tenancy with right of survivorship or a tenancy by the entirety, the entire interest in the joint Account shall be vested in the survivor or survivors on the same terms and conditions as before the death. The survivors and the estate of the deceased Account holder will indemnify DBSI for any loss incurred through treatment of the Account as provided herein.

b. Clients agree that each party to the joint account shall have authority to deal with DBSI as if each were the sole Account owner, all without notice to the other Account owner(s). Clients agree that notice to any Account owner shall be deemed to be notice to all account owners. Each Account owner shall

be jointly and severally liable for this Account. DBSI may follow the instructions of any owner concerning this Account and make deliveries to any owner, of any or all property and payment, even if such deliveries and/or payments shall be made to one owner personally and not to all of the Account owners. DBSI shall be under no obligation to inquire into the purpose of any such demand for delivery of securities or payment and shall not be bound to see to the application or disposition of the securities and/or monies so delivered or paid to any Account owner. Notwithstanding the foregoing, DBSI may require joint action by all account owners with respect to any matter concerning the account, including the giving or cancellation of orders and the withdrawal of monies, Securities and Other Property. In the event DBSI receives conflicting instructions from any owner, it may in its sole discretion: (a) follow any such instructions, (b) require written or verbal authorization of both, all or any owner before acting on the instructions from any one owner, (c) send the assets of the Account to the address of the account, or (d) file an interpleader action in an appropriate court to let the court decide the dispute.

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c. In the event of the death of any owner, the survivor(s) shall immediately give DBSI written notice thereof. DBSI may, before or after receiving such notice, take such action, require such documents, retain such securities and/or restrict transactions in the Account as necessary for its protection against any tax, liability, penalty or loss under any present or future laws or otherwise. Any cost resulting from the death of any owner, or through the exercise by any decedent's estate, survivors (including other Account owners) or representatives of any rights in the Account shall be chargeable against the interest of the survivor(s) as well as against the interest of the estate of the decedent. The estate of the decedent and each survivor (including other Account owners) shall continue to be jointly and severally liable to DBSI for any obligation of the joint account or net debit balance or loss in said account until such time as DBSI distributes the assets in accordance with Clients' instructions.

22. Non-disclosure of Confidential and Material, Non-public Information. During the course of business, employees of DBSI may come into possession of confidential and material non-public information. Under Applicable Law, such employees are prohibited from improperly disclosing or using such information for their personal benefit or for the benefit of any other person, regardless of whether such other person is a Client of DBSI. Client understands that under Applicable Law, DBSI employees are prohibited from communicating such information to Client and that DBSI shall have no responsibility or liability to Client for failing to disclose such information.

23. Third Party Authorization; No Agency. Client agrees that if Client authorizes third party(ies) (including, without limitation, any investment advisor or money manager) to act on Client's Account, such third party(ies) shall be bound by the Terms and Conditions of this Account Agreement. Client further agrees that unless otherwise agreed to in writing by DBSI, third party(ies) authorized by Client to act for Client, whether or not referred to Client by DBSI, is/are not, and shall not be deemed agents of DBSI and DBSI shall have no responsibility or liability to Client for any acts or omissions of such third party, or any officers, employees or agents thereof.

24. No Legal, Tax or Accounting Advice. Client acknowledges and agrees that: (a) neither DBSI, nor Pershing, provide any legal, tax or accounting advice, (b) neither DBSI nor Pershing employees are authorized to give any such advice and (c) Client will not solicit such advice or rely upon such advice given in error, whether or not in connection with transactions in or for any of Client's Account(s). In making legal, tax or accounting decisions with respect to transactions in or for Client's Account(s) or any other matter, Client will

consult with and rely upon Client's own advisers, and not DBSI. Client acknowledges that DBSI shall have no liability therefore.

25. Limitation of Liability. Client agrees that, unless otherwise provided in any other agreement between Client and DBSI or under Applicable Law, DBSI shall not be liable for any loss to Client except in the case of DBSI's gross negligence or willful misconduct. DBSI shall not be liable for loss caused directly or indirectly by government restrictions, exchange or market rulings, suspension of trading, war, strikes, act of foreign or domestic terrorism or other conditions beyond DBSI's control. DBSI shall not be liable for any damages caused by equipment failure, communications line failure, unauthorized access, theft, systems failure and other occurrences beyond DBSI's control.

26. Customer Inquiries/Customer Complaints. For general inquiries, Client will contact the Client Advisor or Branch Supervisor assigned to Client's Account(s) for questions or assistance on any matter relating to these Account(s). Client must direct all formal complaints against DBSI or any of its employees to Deutsche Bank Securities Inc., Compliance Department - Client Inquiries, 60 Wall Street, 23rd Floor, Mail Stop NYC60-2330, New York, NY 10005-2836 or Client may call (212) 250-1085.

27. Entire Understanding. This Account Agreement contains the entire understanding between Client and DBSI concerning the subject matter of this Account Agreement and there are no oral or other agreements in conflict herewith. The Terms and Conditions of this Account Agreement shall apply to each and every account and, collectively, any and all funds, money, Securities and Other Property that Client has with DBSI and supersedes any prior Account Agreement Client may have signed with DBSI. Client acknowledges that Client may be required to enter into separate agreements with respect to products or services offered by or through DBSI or its affiliates.

28. Right to Terminate or Amend. Client agrees that DBSI has the right to terminate this Account Agreement and close any related accounts or amend the Terms and Conditions of this Account Agreement at any time and for any reason by sending written notice of such termination or amendment to Client. Any such termination or amendment shall be effective as of the date that DBSI establishes. Client cannot waive, alter, modify or amend this Account Agreement unless agreed in writing and signed by DBSI. No failure or delay on the part of DBSI to exercise any right or power hereunder or to insist at any time upon strict compliance with any term contained in this Account Agreement, shall operate as a waiver of that right or power or term.

29. Controlling Law. This Account Agreement shall be deemed to have been made in the State of New York and shall

be construed, and the rights of the parties determined, in accordance with the laws of the State of New York and the United States, as amended, without giving effect to the choice of law or conflict-of-laws provisions thereof.

30. Headings. Paragraph headings are for convenience only and shall not affect the meaning or interpretation of any provision of this Account Agreement.

31. Assignment, Separability, Survivability. This Account Agreement shall be binding upon Client's heirs, executors, administrators, personal representatives and permitted assigns. It shall inure to the benefit of DBSI's successors and assigns, or any successor clearing broker, to whom DBSI may transfer Client's Account(s). DBSI may, without notice to Client, assign the rights and duties under this Account Agreement to any of its Affiliates, or to any other nonaffiliate entity upon written notice to Client. If any provision or condition of this Account Agreement shall be held to be invalid or unenforceable by any court, administrative agency or regulatory or self-regulatory agency or body, such invalidity or unenforceability shall attach only to such provision or condition. The validity of the remaining provisions and conditions shall not be affected thereby and this Account Agreement shall be carried out as if any such invalid or unenforceable provision or condition were not contained herein.

32. The provisions of this Account Agreement governing arbitration (Section III), controlling law (Section II.29) and limitation of liability (Section II.25) will survive the termination of this Account Agreement.

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III. ARBITRATION

1. This section of the Account Agreement contains the pre-dispute arbitration agreement between Client and DBSI and Pershing, as applicable, who agree as follows:

- a. All parties to this Account Agreement (being Client, DBSI and Pershing) 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, or as prohibited by Applicable Law;
- b. Arbitration awards are generally final and binding; a party's ability to have a court reverse or modify an arbitration award is very limited;
- c. The ability of the parties to obtain documents, witness statements and other discovery is generally more limited in arbitration than in court proceedings;
- d. 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;
- e. The panel of arbitrators will typically include a minority of arbitrators who were or are affiliated with the securities industry;
- f. 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; and
- g. The rules of the arbitration forum in which the claim is filed, and any amendments thereto, shall be incorporated into this Account Agreement.

2. Subject to the preceding disclosure, Client agrees to arbitrate any controversies or disputes that may arise with DBSI or Pershing, whether based on events occurring prior to, on or subsequent to the date of this Account Agreement, and including any controversy arising out of or relating to any Account with DBSI, the construction, performance or breach of any agreement, or any duty arising from any agreement or other relationship with DBSI, to transactions with or through DBSI, or any controversy as to whether any issue is arbitrable. Any arbitration under this Account Agreement shall be determined only before an arbitration panel set up by FINRA in accordance with its arbitration procedures or an exchange of which DBSI is a member in accordance with the rules of that particular regulatory agency then in effect. Client may elect in the first instance whether arbitration shall be by FINRA or a specific national securities exchange of which DBSI is a member, but failure to make such election by registered letter to Deutsche Bank Securities Inc., Compliance Department - Attention: Director of Compliance, 60 Wall Street, 23rd Floor, Mail Stop NYC60-2330, New York, NY 10005-2836 within five days after receipt of a written request

from DBSI for such election, gives DBSI the right to elect the arbitration forum that will have jurisdiction over the dispute. Judgment upon arbitration awards may be entered in any court, state or federal, having jurisdiction. Any arbitration under this Account Agreement will be conducted pursuant to the Federal Arbitration Act and the laws of the State of New York.

3. Neither DBSI, Pershing nor Client(s) waive any right to seek equitable relief pending arbitration. 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 or who is a member of a putative class who has not opted out of the class with respect to any claims encompassed by the putative class action until: (a) the class certification is denied, or (b) the class is decertified, or (c) the Client 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.

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IV. TAX ELECTION/DECLARATION OF TAX STATUS

This Account Agreement is designed for use by both U.S. Persons and Non-U.S. Persons. Please check the box next to the applicable item below. Client certifies that Client will notify DBSI in writing immediately if the representation certified to below ceases to be true and correct.

1.

U.S. Citizen or U.S. Resident Alien

Form W9

Substitute

Request for Taxpayer Identification Number and Certification

Name (as shown on your income tax return)

Business name/disregarded entity name, if different from above

Check appropriate box for federal tax classification (required):

Individual/sole proprietor

C Corporation

S Corporation

Partnership

Trust/estate

Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=partnership) 4.....

Other 4

Address (number, street, and apt. or suite no.)

City, State, and ZIP code

Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on the "Name" line

to avoid backup withholding. For individuals, this is your social security number (SSN). For other

entities, it is your employer identification number (EIN).

Part II Certification

Under penalties of perjury, I certify that:

1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me), and

2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am

no longer subject to backup withholding, and

3. I am a U.S. citizen or other U.S. person (defined in the instructions).

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return.

Sign

Here

2.

Signature of

U.S. person 4

Non-U.S. Person

I am not a U.S. person (including a U.S. resident alien). I am submitting

the applicable Form W-8 with this form to certify my foreign status and, if applicable,

claim tax treaty benefits.

For example: Client is not a U.S. person (including a U.S. resident alien).

Client agrees to provide DBSI with this application the applicable Internal Revenue

Service (IRS) Form W-8 to certify the client's foreign status. W-8 forms and instructions are available on the IRS website at www.irs.gov.

Date 4

Social Security Number

Employer Identification Number

Exempt payee

[REDACTED]

Print or Type

BY SIGNING BELOW CLIENT ACKNOWLEDGES THAT: (1) CLIENT HAS RECEIVED, READ AND AGREES TO THE TERMS AND CONDITIONS OF THIS ACCOUNT AGREEMENT, INCLUDING THE APPENDIX WHICH CONTAINS IMPORTANT INFORMATION; AND (2) THE INFORMATION CONTAINED IN THIS ACCOUNT APPLICATION IS ACCURATE.

CLIENT ACKNOWLEDGES THAT THIS ACCOUNT AGREEMENT CONTAINS A PRE-DISPUTE ARBITRATION CLAUSE AT SECTION III, PAGE 5, AND CLIENT AGREES TO ITS TERMS (ALL ACCOUNT AGREEMENT SIGNATORIES MUST INITIAL).

INITIAL HERE:

THE INTERNAL REVENUE SERVICE DOES NOT REQUIRE CLIENT'S CONSENT TO ANY PROVISION OF THIS DOCUMENT OTHER THAN THE CERTIFICATION REQUIRED TO AVOID BACKUP WITHHOLDING, AND, IF APPLICABLE, THE CERTIFICATION REQUIRED TO ESTABLISH CLIENT'S STATUS AS A NON-U.S. PERSON AND OBTAIN A REDUCED RATE OF WITHHOLDING.

Important Information for ERISA employee benefit plan clients: U.S. Department of Labor regulations require DBSI to disclose to a responsible plan fiduciary certain information in connection with the services that DBSI provides to a plan, to assist the fiduciary in evaluating the reasonableness of DBSI's services and related compensation. The disclosure is available online, at http://www.pwm.db.com/americas/en/erisa_disclosure_pcs.html. By signing below, you acknowledge

that you are a fiduciary responsible for the procurement of DBSI's services to the plan, you have read the disclosure and you understand the disclosure. Individual or joint account (IF THIS IS A JOINT ACCOUNT, ALL ACCOUNT OWNERS MUST SIGN):

CONFIRMATION OF TAX AND COMPLIANCE RESPONSIBILITIES

Client acknowledges having sole responsibility to fulfill any tax obligations and any other regulatory reporting duties applicable in any relevant jurisdictions that may arise in connection with assets, income or transactions in Client's account(s) and business relationship with DBSI.

CHECK A BOX BELOW ONLY IF CLIENTS DO NOT WANT JOINT TENANTS WITH RIGHTS OF SURVIVORSHIP OR TENANTS BY THE ENTIRETIES.

CLIENTS SPECIFY INSTEAD:

Tenants in common; or

Community Property (for married couples in certain states; each spouse retains 50% interest in the community property upon death of the first spouse).

Signature

_____ -

Print Name

_____ -

Signature

_____ -

Print Name

_____ -

Signature

Print Name

Date

SSN/EIN

Date

SSN/EIN

Date

SSN/EIN

Corporation, partnership, trust or other entity:

CONFIRMATION OF TAX AND COMPLIANCE RESPONSIBILITIES

Client acknowledges having sole responsibility to fulfill any tax obligations and any other regulatory reporting duties applicable to in any relevant jurisdictions

that may arise in connection with assets, income or transactions in Client's account(s) and business relationship with DBSI. Furthermore, Client confirms that the

necessary information (to the best of Client's knowledge and capabilities) is made available no less than annually to the relevant beneficial owner(s), settlor(s),

beneficiary(ies), partner(s), etc. to enable such person(s) to fulfill any respective tax obligations that may arise for such person(s) in connection with Client's

business relationship with DBSI.

Name of Entity

Employer ID No.

Signature of Officer, Partner, Trustee, Authorized Party

Date

Print Name/Title

Signature of Officer, Partner, Trustee, Authorized Party

Date

Print Name/Title

Signature of Officer, Partner, Trustee, Authorized Party

Date

Print Name/Title

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APPENDIX TO THIS ACCOUNT AGREEMENT: DISCLOSURES AND DEFINITIONS

IMPORTANT: PLEASE READ THIS APPENDIX

DISCLOSURES

1. Confirmations. Confirmations of transactions, as well as other communications will be sent to the address Client has provided, or to such other address as Client may hereafter give to DBSI in writing, and all communications so sent, whether by mail, private carrier, facsimile, messenger, electronically or otherwise, shall be deemed delivered to Client when sent, whether actually received or not.

2. Consent to Loan or Pledge of Securities and other Property. Within the limitations imposed by Applicable Law, all Securities and Other Property now or hereafter held, carried or maintained by or in the possession of DBSI that have not been fully paid for may be lent to DBSI, to Pershing or to others, and may be pledged, repledged, hypothecated or rehypothecated without notice to Client, either separately or in common with other Securities and Other Property of DBSI's other Clients for any amount due in any account with DBSI in which Client has an interest, or for any greater amount, and DBSI may do so without retaining in its possession or control for delivery a like amount of similar Securities and Other Property. Client understands that while securities held for Client's Account(s) are loaned out, Client will lose voting rights attendant to such securities. For additional terms that apply to margin accounts only, see the Margin Addendum. Neither Pershing, nor DBSI, will lend or pledge fully paid for securities without Client's written permission.

3. Corrected and Late Trade Reports. DBSI may receive late and/or erroneous trade reports from the marketplace where Client's order is executed. Any such reports may result in an adjustment to Client's order or the information on a trade execution reported to Client.

4. Effect of Attachment or Sequestration of Accounts. DBSI shall not be liable for refusing to obey any orders given by or for Client with respect to any Account which is or has been subject to an attachment or sequestration in any legal proceeding against Client, and DBSI shall be under no obligation to contest the validity of any such attachment or sequestration.

5. Foreign Securities. With respect to debt or equity securities of foreign issuers or debt or deposit instruments of foreign banks ("Foreign Securities"), Client acknowledges and understands that: (a) Foreign Securities are, in most cases, not registered with the Securities and Exchange Commission or listed on any U.S. securities exchange, (b) Foreign Securities, particularly those of issuers in the so-called "emerging markets" are often illiquid, are sometimes subject to legal and/or contractual transfer restrictions and it may be difficult or impossible to dispose

of such Foreign Securities prior to the maturity thereof or to determine the market price thereof for valuation purposes, (c) Foreign Securities, and the issuer, guarantors or other obligors with respect thereto ("Foreign Issuers/Obligors") are subject to a variety of risks in addition to those typically faced in the case of U.S. securities and issuers, including, among other things, currency risk, exchange controls, confiscatory taxation, withholding, limitations on the rights of security holders, civil unrest, hyperinflation, discriminatory treatment of foreign investors, etc., (d) there is often less information available regarding Foreign Issuers/Obligors, and such information may be more difficult to interpret, than is the case with U.S. issuers whose securities are subject to the periodic reporting requirements under U.S. securities laws, (e) there may be no effective means to determine if a Foreign Issuer/Obligor is in default of its obligations in respect of its debt securities or other financial obligations (and Client specifically acknowledges that Foreign Securities which Client purchases may be in default at the time of purchase), (f) Foreign Securities in question may be unrated, and (g) such Foreign Securities are not suitable for all investors. Client authorizes DBSI to purchase Foreign Securities (and, in the case of Foreign Securities denominated in foreign currencies, the relevant foreign currencies) from or sell Foreign Securities (and foreign exchange) to an Affiliate of DBSI. In dealing with such Affiliates, such Affiliates may take and retain their normal commissions, spreads or other fees without regard to DBSI's relationship with Client.

6. Freeriding Prohibited (Not Applicable to Margin Accounts). Paying for the purchase of securities in a cash account with the proceeds of their subsequent sale, known as freeriding, violates Regulation T of the Federal Reserve Board, is prohibited and may, among other things, result in Client's Account being restricted or closed.

7. Impartial Lottery Allocation System. When DBSI holds Securities and Other Property that are callable (all or in part) on Client's behalf, Client will participate in DBSI's impartial lottery allocation system for the called Securities and Other Property.

8. Non-Investment Adviser Capacity. Unless DBSI agrees otherwise in writing, DBSI is not acting as an "investment adviser" (as such term is defined in the Investment Advisers Act of 1940, as amended) with respect to the Client's Account(s).

9. Non-United States Resident Additional Disclosure and Understanding. This disclosure applies to non-United States residents and non-United States domiciled entities. Client's Account is based in the United States, and not in Client's country of residence. DBSI accounts, products and services may

not have been registered, reviewed or approved by any governmental, banking or securities regulator in Client's country of residence or domicile. Not all of DBSI accounts, products, services or investments are available to residents of all countries. Many countries have various laws, rules and regulations that may apply to opening and maintaining accounts, products or services outside Client's country of residence or domicile, including reporting and filing requirements and laws, rules and regulations regarding taxes, exchange or capital controls. Client is responsible for knowledge of and adherence to any such laws, rules and regulations and reporting or filing requirements in Client's country or domicile of residence that might apply as a result of Client's Account with DBSI in the United States. These may include but are not limited to, tax, foreign exchange or capital controls, and reporting or filing requirements that may apply as a result of Client's country of citizenship, domicile or residence. Client currently complies and will continue to comply with any such laws, rules, regulations and reporting or filing requirements as required by Client's country of citizenship, residence or domicile.

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10. Notices. Notices and other communications may also be provided to Client verbally. Such notices and other communications left for Client on Client's answering machine, voice mail, electronic mail or otherwise, are considered to have been delivered to Client whether actually received or not. Transactions entered into Client's Account shall be confirmed by DBSI in writing where required by law or regulation. DBSI will not send separate confirmations for the following transactions: (a) dividends or distributions credited or reinvested, or transactions effected pursuant to a Dividend Reinvestment Plan, (b) shares of money market funds that are purchased or redeemed, or are part of the Cash Sweep Options, or (c) transactions effected pursuant to a periodic plan or an investment company plan. Client's periodic account statements will reflect these transactions. Notices concerning all matters related to Account(s) usually will go through DBSI although Pershing may send notice(s) directly to Client with a duplicate to DBSI should market conditions, time constraints or other circumstances so require.

11. Possible Conflicts of Interest. Services and recommendations that DBSI provides to Client may differ from the services and recommendations provided to other Clients or by other individuals or groups at DBSI and/or affiliates of Deutsche Bank AG, whether acting as principal or agent. DBSI provides investment advice, portfolio management and execution services for many Clients and, in addition, acts as principal in various markets. Given these different roles, individuals and groups at DBSI and affiliates of Deutsche Bank AG are seldom of one view as to an investment strategy and may pursue differing or conflicting strategies. Employees of DBSI shall have no obligation to recommend to Client, or inform Client of, strategies being pursued by DBSI or other Clients. Further, (a) DBSI and its affiliates may provide services for a fee to or solicit business from companies whose securities are recommended by DBSI, (b) DBSI and its affiliates may be paid fees by investment companies registered under the Investment Company Act of 1940 or other investment vehicles, including without limitation, fees for acting as investment advisor, administrator, custodian and transfer agent, and (c) DBSI and its affiliates act as brokers, principals and/or market makers in certain markets and may do so in transactions with Client. DBSI may recommend securities or strategies that are issued, underwritten, implemented or advised by DBSI or one or more of its affiliates. DBSI may receive compensation, in addition to the compensation Client pays DBSI, in the form of Rule 12b-1 fees, distribution fees, finder's fees, fees based upon fund management fees and cash or non-cash payments that are paid by mutual funds (out of fund assets in the case of Rule 12b-1 fees) or by the managers

and other service providers to the funds (not out of fund assets). DBSI also participates in a program offered by Pershing, under which DBSI shares in revenue received by Pershing from mutual funds offered on the Pershing platform. All of these payments may vary based on sales volume or assets under management and may give DBSI a financial incentive to recommend certain funds or strategies and to include those funds in models and programs. In addition, DBSI may receive trail compensation in connection with sales of auction rate securities.

12. Securities Investor Protection Corporation (SIPC). DBSI provides SIPC coverage through Pershing and/or as a member of SIPC. For additional information on this coverage see www.SIPC.org or call the SIPC public information number (201) 371-8300. Client will refer to the Annual Disclosure Statement, at <http://www.pwm.db.com/americas/en/annualdisclosurestatement.html> for additional information regarding SIPC and excess of SIPC coverage.

13. Tax-Exempt Entities. Charitable remainder trusts, foundations, pension plans and other tax-exempt entities may be deemed to receive unrelated business taxable income (UBTI) as a result of investing in certain securities, borrowing monies under a margin loan, investing in a partnership or limited liability company that generates UBTI or other leverage or loan arrangements. Tax-exempt entities should consult with their tax adviser before making an investment or entering into such arrangement. If Client's periodic Account Statement indicates that any Securities were forwarded to Client and Client has not received them, Client should notify DBSI immediately. If notification is received within 120 days after the mailing date, as reflected on Client's Account Statement, replacement will be made free of charge. Thereafter, a fee for replacement may apply.

DEFINITIONS

The following are definitions of certain terms that are used within this Account Agreement. As required, the singular shall be plural and the plural shall be singular.

1. "Account Agreement" means the written agreement entered into between Client(s) and DBSI regarding Client(s)' Account(s). The Account Agreement includes the Terms and Conditions, Arbitration, Tax Election/Declaration of Tax Status, and the Appendix to the Account Agreement, as well as any other applicable disclosure documents related to Client's Account(s), together with any amendments or supplements to such documents. There may be disclosures, agreements and terms applicable to a particular feature, program, account or service provided as a result of a Client election, modification of or addition to the Account Agreement, change in service or otherwise. DBSI will provide to Client such disclosures, agreements and terms, which shall be incorporated into this Account Agreement by

reference. From time to time, DBSI may require that Client sign other agreements or documents for certain services or instructions and such additional agreements and documents shall become part of this Account Agreement.

2. "Affiliate(s)" means any entity that is controlled by, controls or is under common control with DBSI. DBSI is a subsidiary of Deutsche Bank AG. Each affiliate is a separate legal entity.

3. "Applicable Law" means the constitution, rules, regulations, customs and usages of the exchange or market, and its clearing house, if any, where a transaction is executed and applicable federal and state laws and regulations, including but not limited to securities laws and regulations (including the rules and regulations of the Securities and Exchange Commission and the Federal Reserve Board or foreign securities regulator, as applicable), and the rules and regulations of FINRA, or any other self-regulatory agencies or organizations having governing authority to a transaction in an Account in effect from time to time. "Applicable Law" shall also include the rules of any national securities association, registered securities exchange or of the Options Clearing Corporation or other clearing organization applicable to the trading of option contracts.

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4. "Branch Supervisor" means the manager of the branch office at which Client's Account(s) is/are maintained.
 5. "Cash Sweep Options" means the program through which certain uninvested cash balances in eligible Account(s) will be deposited automatically each day into interest-bearing, FDIC-insured depository accounts through DBSI's IDP or into an available money market mutual fund until Client invests these balances or balances are otherwise needed to satisfy obligations arising in connection with Client's Account(s). The Cash Sweep Options are described more fully in the Cash Sweep Options Disclosure Statement, which will be provided to Client under separate cover after the Account is opened.
 6. "DBSI Privacy Statement" means the statement of DBSI's policies pertaining to gathering, protecting and maintaining the confidentiality of Client information and, in certain limited situations, providing Client information outside of DBSI.
 7. "Party" or "Parties" means Client(s) and DBSI, together with its affiliates, collectively.
 8. "Restricted Securities" means securities of a corporation of which Client is a director, executive officer or 10% stockholder, or otherwise classified as a control person or insider, or securities that are subject to any restrictions on resale (whether by Applicable Law, contract or legend on the security), or are not traded on or through a national securities exchange, automated quotation system or other nationally recognized published interdealer quotation system.
 9. "Securities and Other Property" means, but is not limited to, money, securities, financial instruments and commodities of every kind and nature and related contracts and options (whether for present or future delivery), distributions, proceeds, products and accessions of all property owned by the Client or in which the Client has an interest.
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MARGIN DISCLOSURE

IMPORTANT: PLEASE READ THIS MARGIN DISCLOSURE PRIOR TO OPENING A MARGIN ACCOUNT AND

RETAIN A COPY FOR YOUR RECORDS

Deutsche Bank Securities Inc. (DBSI) is furnishing this document to you, the Client, to provide some basic facts about purchasing securities on margin, and to alert you to the risks involved with trading securities in a margin account. Before trading in securities in a margin account, please review this Margin Disclosure carefully (which is to be read in conjunction with the entire Account Agreement). Please call your Client Advisor with any questions or concerns regarding the use of margin.

When you purchase securities, you may pay for the securities in full or you may borrow part of the purchase price from DBSI (via a margin loan offered by Pershing). You may also borrow for purposes other than the purchase of securities based on the value of fully paid securities held in the Account. If you choose to borrow funds from DBSI, you must open a margin account and sign the attached Margin Agreement along with the Account Agreement. If the securities in your account decline in value, so does the value of the collateral supporting your loan, and, as a result, DBSI can take action, such as issuing a margin call and/or selling securities or other assets in any of your accounts (as provided in the Margin Agreement) in order to maintain the required equity in the account.

It is important to fully understand the risks involved in trading securities on margin. These risks include the following:

1. You can lose more funds than you deposit in the Margin Account. A decline in the value of securities that are purchased on margin may require you to provide additional funds to DBSI to avoid the forced sale of those securities or other securities or assets in your account(s).
2. DBSI can force the sale of securities or other assets in your account(s). If the equity in your account falls below the maintenance margin requirements, or DBSI's higher "house" requirements, DBSI can sell the securities or other assets in any of your accounts held at DBSI to cover the margin deficiency. You also will be responsible for any shortfall in the account after such a sale, including costs and interest accrued.
3. DBSI can sell your securities or other assets without contacting you. Some investors mistakenly believe that a firm must contact them for a margin call to be valid, and that the firm cannot liquidate securities or other assets in their accounts to meet the call unless the firm has contacted them first. This is not the case. Generally, DBSI does attempt to notify its Clients of margin calls, but it is not required to do so. However, even if DBSI has contacted a Client and provided a specific date by which the Client can meet a margin call, DBSI can still take necessary steps to

protect its financial interests, including immediately selling the securities without notice to the Client.

4. You are not entitled to choose which securities or other assets in your account(s) are liquidated or sold to meet a margin call. Because the securities are collateral for the margin loan, DBSI has the right to decide which security to sell in order to protect its interests.

5. DBSI can increase its "house" maintenance margin requirements at any time and is not required to provide you advance written notice. These changes in firm policy often take effect immediately and may result in the issuance of a maintenance margin call. Your failure to satisfy the call may cause DBSI to liquidate or sell securities in your account(s).

6. You are not entitled to an extension of time on a margin call. While an extension of time to meet margin requirements may be available to clients under certain conditions, a client does not have a right to the extension.

7. Short Sales are margin transactions and involve the risks described above. A short sale means any sale of securities that you do not own or which are borrowed for your account ("Short Sales"). Because short sales are margin transactions, such transactions are subject to the same risks and terms and conditions of margin transactions.

8. DBSI and/or Pershing may loan any securities which collateralize your margin loan. Securities held in a margin account may be lent, to DBSI, to Pershing or to others, and may be pledged, repledged, hypothecated or rehypothecated by DBSI and/or Pershing, without notice to you. DBSI and/or Pershing may do so without retaining in its possession or control for delivery a like amount of similar Securities and Other Property and in doing so, are authorized to retain certain benefits, including interest on your collateral posted for such loans. While your securities are loaned out, you will lose voting rights attendant to such securities. Pershing and/or DBSI may receive compensation in connection with these transactions. For additional information on rehypothecation, please refer to the Margin Addendum.

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MARGIN ADDENDUM TO ACCOUNT AGREEMENT

READ AND SIGN BELOW TO OPEN A MARGIN ACCOUNT.

Supplemental Terms and Conditions that Apply to Client Margin Account
Any capitalized terms not otherwise defined herein or in the Margin
Disclosures shall have the meaning specified in the
Account Agreement and/or its Appendix annexed thereto.

By signing this Agreement Client agrees to be bound by the Terms and
Conditions in this Margin Addendum as well as
those terms and conditions contained in the Account Agreement all of which
are incorporated herein by reference.

1. Mechanics and Risks of Margin. Client represents that Client understands
the mechanics and risks of using margin
as explained in the attached Margin Disclosure which is incorporated herein
by reference.

2. Financing. Client understands that the margin transactions in the Account
may be financed by Pershing or DBSI.

3. Interest and Costs. Client agrees to pay interest on all sums borrowed
and other balances due and costs incurred by
Deutsche Bank in maintaining the Margin Account on Client's behalf. DBSI
will deduct all interest charges from
Client's Account. Interest charges will be reflected on Client's account
statement. For additional information on
interest charges, please refer to the Annual Disclosure Statement at <http://www.pwm.db.com/americas/en/annualdisclosurestatement.html>. To obtain the current schedule of rates
visit: http://pwm.db.com/pwm/en/alexbrown_legal_overview.html and click on "DBAB Call Rate" or contact the
Client Advisor.

4. Client's Margin Loan Is a Demand Loan. As such, DBSI or Pershing has the
right to demand at any time the
immediate payment of all or any portion of a margin balance.

5. Liens. Client hereby grants to DBSI and its Affiliates a security
interest in and lien upon all Securities and Other
Property in the possession or control of DBSI, any of its Affiliates or
Pershing, in which Client has an interest (held
individually, jointly or otherwise) (collectively all such Securities and
Other Property are referred to herein as "DB
Collateral") in order to secure any and all indebtedness or any other
obligation of Client to DBSI and its Affiliates or
Pershing (collectively, all such obligations are referred to herein as the
"DB Obligations"). Client further grants to
Pershing a security interest in and lien (the "Pershing Lien") upon all
Securities and Other Property held in Client's
Margin Account(s) and any associated cash account(s) ("Margin Collateral")
to secure the indebtedness or any other
obligation of Client to Pershing in this Margin Account (the "Margin
Obligations"). Clients who are joint account
holders (Joint Accountholders) acknowledge and agree that DB Collateral
shall include Securities and Other Property
held in the Account or any other account held by either Joint Accountholder
with DBSI or its Affiliates (whether

individually, jointly or otherwise) and shall secure any and all DB Obligations of each Joint Accountholder to DBSI and its Affiliates. With respect to the lien granted to DBSI and its Affiliates, DBSI (or Pershing, at DBSI's instruction) may, at any time and without prior notice, sell, transfer, release, exchange, settle or otherwise dispose of or deal with any or all such DB Collateral in order to satisfy any DB Obligations. In enforcing this lien, DBSI shall have the discretion to determine which Securities and Other Property to apply for the purposes of the foregoing. With respect to the Pershing Lien, Pershing may, at any time and without prior notice, sell, transfer, release, exchange, settle or otherwise dispose of or deal with any or all Margin Collateral in order to satisfy any Margin Obligations. In enforcing this Pershing lien, Pershing shall have the discretion to determine what and how much Margin Collateral to apply for the purposes of the foregoing. Notwithstanding the foregoing, nothing herein shall be deemed to grant an interest in any Account or assets that would give rise to a prohibited transaction under Section 4975(c)(1)(B) of the Internal Revenue Code of 1986, as amended, or Section 406(a)(i)(B) of the Employee Retirement Income Security Act of 1974, as amended. Securities and Other Property held in Client's retirement account(s) maintained by DBSI, which may include IRAs or qualified plans, are not subject to this lien and such Securities and Other Property may only be used to satisfy Client's indebtedness or other obligations related to Client's retirement account(s).

6. Consent to Loan or Pledge of Securities and Other Property. Within the limitations imposed by Applicable Law, all Securities and Other Property now or hereafter held, carried or maintained by or in the possession of DBSI that have not been fully paid for, or are held in a margin account as collateral for a margin loan, may be lent to DBSI, to Pershing or to others, and may be pledged, repledged, hypothecated or rehypothecated by DBSI and/or Pershing without notice to Client, either separately or in common with other securities, commodities and other property of DBSI's or Pershing's other clients for any amount due in any account with DBSI in which Client has an interest, or for any greater amount, and DBSI and/or Pershing may do so without retaining in its possession or control for delivery a like amount of similar Securities and Other Property. Client understands that while securities held for Client's Account(s) are loaned out, Client will lose voting rights attendant to such securities. Margin securities in Client's account may be used for, among other things, settling short sales and lending the securities for short sales. As a result, Pershing and/or DBSI may receive compensation in connection with these transactions. Neither Pershing, nor DBSI, will lend or pledge fully paid for securities without

Client's written permission.

7. Margin Maintenance, Calls for Additional Collateral, Liquidations and Covering Short Positions. In order to engage in margin transactions, Client will be required to maintain such Securities and Other Property in Client's Margin Account(s) for margin purposes as shall be required under Applicable Law or otherwise by DBSI or Pershing for any reason. Client may be required to post, deposit or maintain additional collateral at any time. In addition to the rights otherwise set forth in this Agreement, DBSI and Pershing also shall have the right to liquidate any Securities and Other Property held in the Margin Account whenever DBSI or Pershing deems it necessary for its protection. Circumstances that may result in collateral calls or liquidations include, but are not limited to, the failure to promptly meet any call for additional collateral, the filing of a petition in bankruptcy, the appointment of a receiver by or against Client, or the attachment or levy against any account with DBSI in which Client has an interest.

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The rights of DBSI and Pershing shall include the right to buy all Securities and Other Property which may be short in such account, to cancel any open orders and to close any or all outstanding contracts, all without demand for margin or additional margin, notice of sale or purchase or other notice or advertisement, each of which is expressly waived. Upon a default, Client will also bear the cost of preserving the value of collateral, including hedging transactions that may be executed at DBSI or Pershing's discretion. Any sales or purchases hereunder may be made at on any exchange or other market where such business is usually transacted, or at public auction or private sale, and DBSI or Pershing may be the purchaser for its own account. Client understands that any prior demand, or call or prior notice of the time and place of such sale or purchase shall not be considered a waiver of the right to sell or buy without demand or notice as provided herein. Client further understands and agrees that if DBSI or Pershing permits Client a period of time in which to satisfy a call, the granting of that period of time shall not in any way waive or diminish the right of DBSI or Pershing to shorten the time period in which Client must satisfy the call, including an outstanding call, or to demand that a call be satisfied immediately. Client further understands that liquidations may involve sales of positions in Client's Account(s) that are as great as the full indebtedness owed by Client.

8. Reg T Extensions. Client authorizes DBSI, at its discretion, to request and obtain extension(s) of Client's time to make payment for securities Client purchases, as provided for by Federal Reserve Bank Regulation T.

9. Short Sales of Securities. Client understands that before executing a Short Sale, DBSI or Pershing is generally required to make an affirmative determination as to whether DBSI or Pershing will receive delivery of the securities from the Client or that the securities can be borrowed by the settlement date. This process is commonly referred to as "obtaining a locate." If a sufficient quantity of securities is not available from inventory, DBSI or Pershing may, among other things, contact third-party lenders to ascertain whether they have securities available for lending. If a sufficient quantity of securities appears borrowable, DBSI or Pershing may proceed to execute the short sale on Client's behalf. A locate is simply an indication that, as of the time the locate is obtained, it appears that securities will be available for borrowing on the settlement date. A locate is not a guarantee that securities will actually be available for lending and delivery on the settlement date or that the lender will not thereafter require the return of the borrowed securities. If the securities are not available for borrowing for any reason by the settlement date, Client (as the seller) will "fail to deliver" to the purchaser. In that

circumstance, a buy-in of the securities that were not timely delivered will occur on the morning of the third business day after normal settlement date and Client will be responsible for all losses and costs of the buy-in. See "Mandatory Close-Out of Short Sales" below. Client is ultimately responsible for the delivery of securities on the settlement date and for the consequences of a failure to deliver and the timely return of securities borrowed on Client's behalf including any losses incurred by DBSI or Pershing relating to such short sales. Short positions will be "marked to the market" weekly. If the aggregate value of all securities sold by Client appreciates, an amount equal to such appreciation will be transferred from Client's Margin Account to Client's short Account resulting in a debit entry in the Margin Account. If the aggregate value of all the securities sold short depreciates, an amount equal to such decline will be transferred from the cash account to the Margin Account resulting in a credit entry in the Margin Account. The closing price from the previous business day is used to determine any appreciation or depreciation in the market value of any security sold short. Please note, from time to time, DBSI or Pershing may be prohibited from effecting a short sale in accordance with Applicable Law whether or not a "locate" is obtained.

10. Mandatory Close-Out of Short Sales. Applicable Law generally requires that short sales of equity securities be closed by no later than the beginning of regular trading hours on the first business day following the settlement date if delivery of the securities has not occurred. The close-out is effected by DBSI or Pershing purchasing the securities for cash or guaranteed delivery of like kind and quantity. The requirement generally applies to undelivered equity securities that, on the date of the short sale, appeared on the "restricted list" of FINRA or a national securities exchange of which DBSI or Pershing is a member (i.e. those securities that have a clearing short position of 10,000 shares or more and that are equal to at least 1/2 of 1% of the issue's total shares outstanding) ("Threshold Securities"). DBSI or Pershing will be required to effect a close-out mandated by Applicable Law whether or not a "locate" was obtained and whether or not a buy-in notice was issued by a purchaser or securities lender.

11. Tax Treatment of Earnings on Pledged Municipal Securities. Client will consult with a tax adviser prior to depositing municipal securities to satisfy margin requirements as there may be tax consequences of doing so.

12. Rehypothecation and Tax Treatment of Payments in Lieu of Dividends. The Internal Revenue Code generally provides that, subject to certain requirements, dividends paid to a U.S. individual shareholder from domestic corporations and certain foreign corporations are subject to tax at the

reduced rates applicable to long-term capital gains. Payments in lieu of dividends are not eligible for the reduced rate of tax for dividends and are taxed at ordinary income tax rates. DBSI and Pershing have the right to rehypothecate margined shares in Client's Margin Account. Accordingly, Client hereby agrees that Client's Account may receive payments in lieu of dividends, which unlike actual dividends are taxed at ordinary income tax rates. Client further agrees that neither DBSI nor Pershing shall be responsible to Client for any additional taxes or other costs Client incurs for receipt of such payments in lieu of dividends. Client also agrees to consult with Client's tax adviser if Client has any questions relating to payments in lieu of dividends.

13. Additional Risks. The use of margin may enable Client to increase the size of the trades and/or volume of trading in the account which may result in an increase in the amount of commissions being paid to DBSI or Pershing by Client.

14. Restricted Securities. Client will not post Restricted Securities as collateral for margin transactions without the prior approval of DBSI.

15. Collection Remedies. DBSI reserves the right to assert any other remedies available under Applicable Law to collect any and all amount(s) due to DBSI or Pershing.

16. Receipt of Margin Disclosure. Client hereby acknowledges receipt of the Margin Disclosure and Client acknowledges Client's understanding of and agreement to the contents thereof.

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BY SIGNING BELOW, CLIENT ACKNOWLEDGES THAT CLIENT HAS RECEIVED, READ AND AGREES TO THE TERMS OF THIS MARGIN AGREEMENT, INCLUDING THE MARGIN DISCLOSURE. This Agreement is subject to the Pre-Dispute Arbitration Clause in Section III, page 5, of the Account Agreement.

Account Number

Individual or joint account (IF THIS IS A JOINT ACCOUNT, ALL ACCOUNT OWNERS MUST SIGN):

Signature

Print Name

Signature

Print Name

Signature

Print Name

Corporation, partnership, trust or other entity:

CONFIRMATION OF AUTHORITY TO BORROW:

If this is an agreement for a trust, other fiduciary account or other non-natural person(s) account, the authorized person hereby certifies and represents that

the use of a margin account and specifically the borrowing, lending and pledging of Securities and Other Property as described herein and in the Margin

Section is in accordance with and authorized by the provisions of the trust or other instrument and Applicable Law governing the trust or other entity.

Name of

Entity _____

Employer ID No. _____

Signature of Officer, Partner, Trustee, Authorized

Party _____

Date _____

Print Name/Title

Signature of Officer, Partner, Trustee, Authorized

Party _____

Date _____

Print Name/Title

Signature of Officer, Partner, Trustee, Authorized

Party _____

Date _____

Print Name/Title _____

Date _____

SSN/EIN _____

Date _____

SSN/EIN _____

Date _____

SSN/EIN _____

FOR OFFICE USE ONLY

Branch Manager approval for margin accounts: Signature _____

Date _____

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Optional Form:

Consent to Electronic Delivery of Materials and Communications

Please read, complete, sign, date, and return the next page if you wish to permit Deutsche Bank to send you

Materials and Communications listed on the form by electronic means in lieu of hard copy. This is an optional

form. You may revoke your consent to electronic delivery at any time without charge by sending a written

request to your account representative.

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Deutsche Asset
& Wealth Management

Consent to Electronic Delivery of Materials and Communications

Re:

[insert account number(s)]

Email:

Facsimile Number:

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Client: By signing below, (a) I represent that I am authorized to sign on behalf of the account(s) covered by this consent form, (b) I hereby consent to receipt of Materials via the electronic means described above, (c) I represent that the email address provided above is an email address that an accountholder will access, and is not an email address of someone other than an accountholder, (d) I agree to notify Deutsche Asset & Wealth Management promptly of any change to my email address or facsimile number, and (e) I agree to hold Deutsche Asset & Wealth Management harmless to the extent I do not receive

Materials through my failure to notify Deutsche Asset & Wealth Management of any change to my email address or facsimile number. I understand that I may revoke my consent at any time without charge by sending a written request to my account representative. By signing below as Joint Tenants or Tenants in Common, the parties agree that delivery by electronic means to the email address herein constitutes delivery to each party.

This consent applies to all accounts that I hold with Deutsche Asset & Wealth Management.

Title of Account:

Signature:

Name of Authorized Signatory:

Date:

Title:

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By signing here, the Office Supervisor certifies that the above listed client signatory has proper authority to grant this consent:

Signature:

Name of Authorized Signatory:

Date:

Title:

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