

Deutsche Bank
Private Wealth Management
Corporate Account Authorization and Terms and Conditions
Officer's Certificate
Account Number:

I,
of

, the duly elected and acting
(the "Corporation") hereby certify that:

(1) The following resolutions were adopted by unanimous consent of the Board of Directors of the Corporation on the
of

,
RESOLVED, that any persons designated by the

:
of the Corporation are authorized on behalf of the Corporation to:

(A) Open and maintain one or more brokerage account(s) for and in the name of the Corporation at Deutsche Bank Securities Inc. (referred to herein as "DBSI") (including any successor thereof);

(B)
(C)
(D)
(E)
(F)

Deposit, deliver, assign, withdraw and transfer funds, instruments and securities of any type;

Sell any securities owned by the Corporation;

Buy any securities in a cash account; and

Buy, sell and sell securities (including put and call options) short in a margin account; and (DELETE (E) IF INAPPLICABLE)

Execute all documents, and exercise and direct the exercise of all duties, rights, and powers, and take all actions necessary or appropriate to perform the powers enumerated above.

FURTHER RESOLVED, that the

of the Corporation shall certify in writing any changes in the powers, office or identity of those persons authorized to perform the powers enumerated above. DBSI may rely upon any such certificate of authority furnished by the Corporation until written certification of any change in authority shall have been received by DBSI. Any past action in accordance with this resolution is hereby ratified and confirmed. The powers enumerated above pertain to securities of any type now or hereafter held by the Corporation in its own right or in any fiduciary capacity. Powers previously certified by the Corporation shall not be affected by the dispatch or receipt of any other form of notice nor any change in the position with the Corporation held by any person so empowered. Any officer of the Corporation is hereby authorized to certify these resolutions to whom it may concern.

(2)
Each of the following are authorized to perform the powers enumerated in the foregoing resolutions and by signing his or her name in this section 2 agrees on behalf of the Corporation to the Terms and Conditions

attached hereto:

(List name and corporate position)

Name

Signature

Position

Name

Signature

Position

day

Name

Position

Signature

Name

Signature

Deutsche Bank Securities Inc., a subsidiary of Deutsche Bank AG, conducts investment banking and securities activities in the United States.

Position

09-PWM-0186 Corp Acct Auth & T&C (02/12) CORP

006420-022212

(3) The Corporation is duly organized and existing under the laws of the State of
actions authorized by the resolutions certified herein.
and has the powers to take the

- (4)
- (5)
- (6)

No action has been taken to rescind or amend said resolutions, and they are now in full force and effect.

No one other than the Corporation shall have any interest in any account opened and maintained in the name of the Corporation.

THE TERMS AND CONDITIONS ON THE NEXT TWO PAGES CONTAIN A PRE-DISPUTE ARBITRATION CLAUSE AT PARAGRAPH 11.

IN WITNESS WHEREOF, I have hereunto affixed my hand and the seal of the Corporation this

SEAL

Signature of Certifying Officer
Name of Certifying Officer
Corporate Title of Certifying Officer
day of

,

Please note: A second certifying officer must sign if the first certifying officer is one of the persons listed in section 2.

Signature of Second Certifying Officer
Name of Second Certifying Officer
Corporate Title of Second Certifying Officer

IF THE CLIENT IS INCORPORATED OUTSIDE THE UNITED STATES, THE CLIENT MUST COMPLETE AND RETURN A FORM W-8 ALONG WITH THIS OFFICER'S CERTIFICATE.

09-PWM-0186 Corp Acct Auth & T&C (02/12) CORP
006420-022212

Terms and Conditions Corporate Accounts

Deutsche Bank Securities Inc. (referred to herein as "DBSI") accepts the Account of the client described in the attached certificate (the "Client").

The term DBSI includes its affiliates, officers, directors, agents and employees. Client understands that Pershing LLC is the carrier of the Account as clearing broker pursuant to a clearing agreement with DBSI.

Deutsche Bank Securities Inc. is a subsidiary of Deutsche Bank AG. As used herein, the term "affiliate of Deutsche Bank" or "Deutsche Bank affiliates" means Deutsche Bank AG and its subsidiaries and affiliates. Each of Deutsche Bank AG and its affiliates is a separately incorporated legal entity, none of which is responsible for the obligations of the others.

"Securities and Other Property" shall include, but shall not be limited to, money

and securities, financial instruments, commodities of every kind and nature, and all contracts and options relating to any thereof, owned by the Client or in which the Client has an interest. These terms and conditions shall be construed in accordance with the laws of the State of New York and the United States, as amended.

By opening the Account, Client agrees to the following terms and conditions:

1. Confirmations, and Transmission of Instructions

Client agrees to notify DBSI in writing, within ten (10) days of sending Client a confirmation, of any objection Client has to any transaction in its Account. In the absence of such written notification, Client agrees that all transactions for its Account will be final and binding on it. Client understands that it is responsible for transmission of instructions to DBSI and that Client bears the risk of loss arising from the method of transmission that Client uses in the event of transmission errors, misunderstandings, impersonations, transmission by unauthorized persons or forgery. Client agrees to release and indemnify DBSI from any and all liability arising from the execution of transactions based on such instructions

except if DBSI's gross negligence caused the transmission error.

2. Cash Account

With respect to the Account: (i) Client will make full cash payment on or before settlement date for each security purchased, unless funds sufficient therefor are already held in the Account; (ii) Client does not contemplate selling any security before it is paid for as provided in the preceding clause; (iii) Client will own each security sold at the time of sale and, unless such security is already held in the account, will promptly deliver such security thereto on or before settlement date; and (iv) Client will promptly make full cash payment of any amount that may become due in order to meet necessary requests for additional deposits or, with respect to any unissued security purchased or sold, to mark to the market.

3. Short and Long Orders; Deliveries and Settlements

Client agrees that, in giving orders to sell, all "short" sales will be designated by it as "short" and all other sales will be designated by DBSI as "long." Client also agrees that DBSI may, at its discretion, immediately cover any short sales in the Account, without prior notice. In case of nondelivery

of a security, DBSI is authorized to purchase the security to cover Client's position and charge any loss, commissions and fees to the Account. Client agrees that if DBSI fails to receive payment for securities Client has purchased, DBSI may, without prior demand or notice, sell those securities or other property held by DBSI in the Account and any loss resulting therefrom will be charged to the Account. Client authorizes DBSI, at its discretion, to request and obtain extension(s) of Client's time to make payment for securities Client purchased, as provided for by Federal Reserve Bank Regulation T.

4. 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 "Collatera") in order to secure any and all indebtedness or any other obligation of Client to DBSI and its Affiliates or Pershing (provided that such indebtedness or obligation to Pershing arises in connection with this Agreement) (collectively, all such obligations are referred to herein as the "Obligations"). Clients who are joint accountholders ("Joint Accountholders") acknowledge and agree that pursuant to this lien, 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 (whether individually, jointly or otherwise) and shall secure any and all Obligations of each Joint Accountholder 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 which Securities and Other Property 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).

5. Authority to Borrow

In case of the sale of any security or other property by DBSI at Client's direction and DBSI's inability to timely deliver the same to the purchaser by reason of Client's failure to supply DBSI therewith, Client authorizes DBSI to purchase or borrow any security or other property necessary to make the required delivery, and Client agrees to be responsible for any loss or cost, including interest, which DBSI sustains as a result of Client's failure to make delivery to DBSI.

6. Interest Charges

Client acknowledges that debit balances in the Account, including, but not limited to, those arising from its failure to make payment by settlement date for securities purchased, will be charged interest at the then current rate, in accordance with DBSI's usual custom. Interest will be computed on the net daily debit balance, which is computed by combining all debit balances and credit balances in each account with the exception of credit balances associated with short security positions.

7. Credit Information and Investigation

Client authorizes DBSI to obtain reports concerning its credit standing and business conduct at DBSI's discretion. Client also authorizes DBSI and any affiliate of Deutsche Bank, including, without limitation, Deutsche Bank AG, to share among such affiliates such information and any other confidential information DBSI and such affiliates may have about Client and the Account.

09-PWM-0186 Corp Acct Auth & T&C (02/12) CORP

006420-022212

8. Satisfaction of Indebtedness

Client agrees to satisfy, upon demand, any indebtedness, including any interest and commission charges. Client further agrees to pay the reasonable costs and expenses of collection of any amount it owes DBSI, including reasonable attorney's fees and court costs. Client agrees that DBSI and its clearing broker have the right to collect any debit balance or other obligations owing in Client's Account, and that such rights may be assigned to each other.

9. 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 DBSI in its possession that have not been fully paid for, may be lent, either to DBSI or to others, pledged, and repledged by DBSI, without notice to Client. Client understands that while securities held for its Account are loaned out, Client will lose voting rights attendant to such securities.

10. Aggregation of Orders and Average Prices

Client authorizes DBSI, at its discretion, to aggregate orders for the Account with other customer orders. Client recognizes that in so doing, it may

receive an average price for its orders that may be different from the price(s) it might have received had its orders not been aggregated. Client understands that this practice may also result in its orders being only partially completed.

11. Arbitration

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This section of the Agreement contains the predispute arbitration agreement between us. By signing this Agreement, we agree as follows:

(i) All parties to this Agreement are giving up the right to sue each other in court, including the right to a trial by jury, except as provided by the rules of the arbitration forum in which a claim is filed;

(ii) Arbitration awards are generally final and binding. A party's ability to have a court reverse or modify an arbitration award is very limited;

(iii) The ability of the parties to obtain documents, witness statements and other discovery is generally limited in arbitration as compared to court proceedings;

(iv) 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 twenty (20) days prior to the first hearing date;

(v) The panel of arbitrators will typically include a minority of arbitrators who were or are affiliated with the securities industry;

(vi) 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

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(vii) The rules of the arbitration forum in which the claim is filed, and any amendments thereto, shall be incorporated into this Agreement.

Client agrees to arbitrate with DBSI any controversies which may arise,

whether or not based on events occurring prior to the date of this agreement, including any controversy arising out of or relating to any account with DBSI, to the construction, performance or breach of any agreement, or any duty arising from any agreement or other relationship with DBSI, or to transactions with or through DBSI, only before the Financial Industry Regulatory Authority, Inc., or any exchange of which DBSI is a member, at Client's election. Client agrees that Client shall make Client's election by registered mail 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. If Client's election is not received by DBSI within ten (10) calendar days of receipt of a written request from DBSI that Client make an election, then DBSI may elect the forum before which the arbitration shall be held.

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Neither DBSI nor Client 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 (i) the class certification is denied; or (ii) the class is decertified; or (iii) the customer is excluded from the class by the court. Such forbearance to enforce an agreement to arbitrate shall not constitute a waiver of any rights under this agreement except to the extent stated herein.

Important Disclosures for Your Records

Deutsche Bank Securities Inc. "DBSI" is furnishing this document to you to alert you to important matters regarding your account.

Securities Investor Protection Corporation ("SIPC")

Securities held by our clearing broker, Pershing LLC, for your account are protected up to the total net equity held in the account. Of this total, SIPC provides \$500,000 of coverage, including \$100,000 for claims for cash awaiting reinvestment. The remaining coverage is provided by Pershing through a commercial insurer. SIPC protection applies when the SIPC member firm through which you hold your investments fails financially and is unable to meet its obligations to securities clients, but SIPC protection does not protect against losses attributable to the rise and fall in the market

value of investments. A small number of client accounts are not carried on Pershing's books due to specific account factors. These accounts are covered under DBSI's SIPC membership. DBSI does not provide coverage in excess of SIPC coverage. Certain investments, such as commodity futures contracts and currency, are ineligible for SIPC protection. For additional information on SIPC, see www.SIPC.org or call the SIPC public information number, (202) 371-8300.

Payment for Order Flow

DBAB receives payment when its routes for execution certain orders in certain securities. The determination as to where to route orders is based on several factors, consistent with DBSI's obligation to provide best execution

for all client orders. Because several factors are considered with respect to such determinations, DBSI could potentially secure price improvements on such orders by routing them in a different manner and all such orders potentially could be executed at prices superior to the best bid or best offer. Payment is received by DBSI in the form of rebates, or credits against exchange fees, and specialist fees. Details will be furnished upon written request.

09-PWM-0186 Corp Acct Auth & T&C (02/12) CORP

006420-022212