

J.P. Morgan Entity Resolution Form

D. Brokerage

3. RESOLVED, that those persons identified above are authorized in the name and on behalf of the Entity to execute a brokerage agreement with J.P. Morgan Securities LLC and any successors or assigns; to purchase on margin or otherwise and borrow (on a secured or unsecured basis) from, sell (including short sales in a margin account), and lend (on a secured or unsecured basis) to, and to otherwise enter into transactions of any kind with J.P. Morgan with respect to any and all securities and financial instruments whatsoever in which J.P. Morgan may deal, broker or act as counterparty from time to time; to enter into any derivative transactions with respect to the foregoing, including over the counter equity derivatives and structured transactions (including, but not limited to options, swaps, collars, caps and floors); to pledge any funds or instruments for the purposes of securing the Entity's obligations with respect to the foregoing to establish and operate one or more brokerage or other accounts in connection with foregoing activities and transactions; and, to act on behalf of the Entity in all respects regarding the Entity's brokerage accounts.

E. Credit

4. RESOLVED, that the persons specified above are authorized in the name and on behalf of the Entity: to borrow from time to time from J.P. Morgan sums of money, for periods of time and upon terms as may to them in their discretion seem advisable; to execute notes or other obligations to evidence borrowings; to enter into agreements with respect to borrowings, to discount with Morgan any bills or notes receivable held by the Entity upon such terms as they may deem proper; to apply for and obtain letters of credit and to execute applications, agreements, trust receipts and all other documents in connection therewith; to execute and deliver, in their discretion, any guarantee, indemnity agreement or undertakings deemed necessary or advisable to carry out the purpose and intent of the foregoing resolutions; to pledge any of the assets or property of the Entity, for the purpose of securing any of the foregoing transactions or any transaction entered into by any other entity or personal and, to endorse securities and/or to issue appropriate powers of attorney, documents or assignments in furtherance thereof.

F. General

5. RESOLVED, that those individuals identified in above, acting in the manner specified therein, are authorized to delegate the authority granted under the foregoing resolutions to any other person by written appointment submitted to J.P. Morgan and any such appointment shall remain in full force and effect until J.P. Morgan shall receive written notice to the contrary from the Entity

6. RESOLVED, that any transaction of the type authorized by the preceding resolutions which has been taken are hereby in all respects approved, confirmed and ratified; and

7. RESOLVED, that any resolution certified to J.P. Morgan by the Secretary, or other duly appointed officer of the Entity shall remain in full force and effect until J.P. Morgan shall receive certification of a subsequent resolution amending, superseding or revoking it.

8. RESOLVED, any persons authorized to act by the preceding resolutions may utilize the Web site provided by J.P. Morgan (the "Site") via the Internet 24 hours a day, seven days a week to act in the manner indicated in this resolution provided the functionality is available via the Site. Transactions requiring more than one signature to complete will not be available via the Site. Site usage by any Authorized Person is subject to the Web site agreements and disclosures available on the Web site, or via hard copy at your request.

G. Certification of Incumbency (Partnerships should not complete)

The following certificate of incumbency must be completed when the authorized signers are identified by title only. I also certify that the following are officers of the Entity elected or appointed until their successors are elected or appointed and that you shall be entitled to rely upon their continued incumbency and empowerment to act for the Entity until you have been furnished with a duly certified notice to the contrary:

Print Name _____	Print Title _____
Print Name _____	Print Title _____
Print Name _____	Print Title _____
Print Name _____	Print Title _____

H. Signature (Partnership)

Signatures of all general partners (type or print names next to signatures)

	Signature _____	Print Name and Title _____	Date _____
	Signature _____	Print Name and Title _____	Date _____

I. Signature (Entities other than Partnerships)

IN WITNESS OF WHICH I have set my hand as Secretary (or other duly authorized officer) of this Entity on this the 6th day of February, 2013.

	<u>Doreen K. Indyke</u>	<u>Doreen K. Indyke, Secretary</u>	<u>2/6/2013</u>
	Signature	Print Name and Title	Date