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ISDA[®]

International Swaps and Derivatives Association, Inc.

2002 MASTER AGREEMENT

dated as of **March 28, 2012**

**J.P. MORGAN VENTURES ENERGY
CORPORATION**

**CITY OF LONG BEACH,
CALIFORNIA**

..... and

have entered and/or anticipate entering into one or more transactions (each a "Transaction") that are or will be governed by this 2002 Master Agreement, which includes the schedule (the "Schedule"), and the documents and other confirming evidence (each a "Confirmation") exchanged between the parties or otherwise effective for the purpose of confirming or evidencing those Transactions. This 2002 Master Agreement and the Schedule are together referred to as this "Master Agreement".

Accordingly, the parties agree as follows:—

1. Interpretation

- (a) **Definitions.** The terms defined in Section 14 and elsewhere in this Master Agreement will have the meanings therein specified for the purpose of this Master Agreement.
- (b) **Inconsistency.** In the event of any inconsistency between the provisions of the Schedule and the other provisions of this Master Agreement, the Schedule will prevail. In the event of any inconsistency between the provisions of any Confirmation and this Master Agreement, such Confirmation will prevail for the purpose of the relevant Transaction.
- (c) **Single Agreement.** All Transactions are entered into in reliance on the fact that this Master Agreement and all Confirmations form a single agreement between the parties (collectively referred to as this "Agreement"), and the parties would not otherwise enter into any Transactions.

2. Obligations

- (a) **General Conditions.**
 - (i) Each party will make each payment or delivery specified in each Confirmation to be made by it, subject to the other provisions of this Agreement.
 - (ii) Payments under this Agreement will be made on the due date for value on that date in the place of the account specified in the relevant Confirmation or otherwise pursuant to this Agreement, in freely transferable funds and in the manner customary for payments in the required currency. Where settlement is by delivery (that is, other than by payment), such delivery will be made for receipt on the due date in the manner customary for the relevant obligation unless otherwise specified in the relevant Confirmation or elsewhere in this Agreement.

(iii) Each obligation of each party under Section 2(a)(i) is subject to (1) the condition precedent that no Event of Default or Potential Event of Default with respect to the other party has occurred and is continuing, (2) the condition precedent that no Early Termination Date in respect of the relevant Transaction has occurred or been effectively designated and (3) each other condition specified in this Agreement to be a condition precedent for the purpose of this Section 2(a)(iii).

(b) **Change of Account.** Either party may change its account for receiving a payment or delivery by giving notice to the other party at least five Local Business Days prior to the Scheduled Settlement Date for the payment or delivery to which such change applies unless such other party gives timely notice of a reasonable objection to such change.

(c) **Netting of Payments.** If on any date amounts would otherwise be payable:—

- (i) in the same currency; and
- (ii) in respect of the same Transaction,

by each party to the other, then, on such date, each party's obligation to make payment of any such amount will be automatically satisfied and discharged and, if the aggregate amount that would otherwise have been payable by one party exceeds the aggregate amount that would otherwise have been payable by the other party, replaced by an obligation upon the party by which the larger aggregate amount would have been payable to pay to the other party the excess of the larger aggregate amount over the smaller aggregate amount.

The parties may elect in respect of two or more Transactions that a net amount and payment obligation will be determined in respect of all amounts payable on the same date in the same currency in respect of those Transactions, regardless of whether such amounts are payable in respect of the same Transaction. The election may be made in the Schedule or any Confirmation by specifying that "Multiple Transaction Payment Netting" applies to the Transactions identified as being subject to the election (in which case clause (ii) above will not apply to such Transactions). If Multiple Transaction Payment Netting is applicable to Transactions, it will apply to those Transactions with effect from the starting date specified in the Schedule or such Confirmation, or, if a starting date is not specified in the Schedule or such Confirmation, the starting date otherwise agreed by the parties in writing. This election may be made separately for different groups of Transactions and will apply separately to each pairing of Offices through which the parties make and receive payments or deliveries.

(d) **Deduction or Withholding for Tax.**

(i) **Gross-Up.** All payments under this Agreement will be made without any deduction or withholding for or on account of any Tax unless such deduction or withholding is required by any applicable law, as modified by the practice of any relevant governmental revenue authority, then in effect. If a party is so required to deduct or withhold, then that party ("X") will:—

- (1) promptly notify the other party ("Y") of such requirement;
- (2) pay to the relevant authorities the full amount required to be deducted or withheld (including the full amount required to be deducted or withheld from any additional amount paid by X to Y under this Section 2(d)) promptly upon the earlier of determining that such deduction or withholding is required or receiving notice that such amount has been assessed against Y;
- (3) promptly forward to Y an official receipt (or a certified copy), or other documentation reasonably acceptable to Y, evidencing such payment to such authorities; and

(4) if such Tax is an Indemnifiable Tax, pay to Y, in addition to the payment to which Y is otherwise entitled under this Agreement, such additional amount as is necessary to ensure that the net amount actually received by Y (free and clear of Indemnifiable Taxes, whether assessed against X or Y) will equal the full amount Y would have received had no such deduction or withholding been required. However, X will not be required to pay any additional amount to Y to the extent that it would not be required to be paid but for:—

(A) the failure by Y to comply with or perform any agreement contained in Section 4(a)(i), 4(a)(iii) or 4(d); or

(B) the failure of a representation made by Y pursuant to Section 3(f) to be accurate and true unless such failure would not have occurred but for (I) any action taken by a taxing authority, or brought in a court of competent jurisdiction, after a Transaction is entered into (regardless of whether such action is taken or brought with respect to a party to this Agreement) or (II) a Change in Tax Law.

(ii) **Liability.** If:—

(1) X is required by any applicable law, as modified by the practice of any relevant governmental revenue authority, to make any deduction or withholding in respect of which X would not be required to pay an additional amount to Y under Section 2(d)(i)(4);

(2) X does not so deduct or withhold; and

(3) a liability resulting from such Tax is assessed directly against X,

then, except to the extent Y has satisfied or then satisfies the liability resulting from such Tax, Y will promptly pay to X the amount of such liability (including any related liability for interest, but including any related liability for penalties only if Y has failed to comply with or perform any agreement contained in Section 4(a)(i), 4(a)(iii) or 4(d)).

3. Representations

Each party makes the representations contained in Sections 3(a), 3(b), 3(c), 3(d), 3(e) and 3(f) and, if specified in the Schedule as applying, 3(g) to the other party (which representations will be deemed to be repeated by each party on each date on which a Transaction is entered into and, in the case of the representations in Section 3(f), at all times until the termination of this Agreement). If any “Additional Representation” is specified in the Schedule or any Confirmation as applying, the party or parties specified for such Additional Representation will make and, if applicable, be deemed to repeat such Additional Representation at the time or times specified for such Additional Representation.

(a) **Basic Representations.**

(i) **Status.** It is duly organised and validly existing under the laws of the jurisdiction of its organisation or incorporation and, if relevant under such laws, in good standing;

(ii) **Powers.** It has the power to execute this Agreement and any other documentation relating to this Agreement to which it is a party, to deliver this Agreement and any other documentation relating to this Agreement that it is required by this Agreement to deliver and to perform its obligations under this Agreement and any obligations it has under any Credit Support Document to which it is a party and has taken all necessary action to authorise such execution, delivery and performance;

(iii) **No Violation or Conflict.** Such execution, delivery and performance do not violate or conflict with any law applicable to it, any provision of its constitutional documents, any order or judgment of any court or other agency of government applicable to it or any of its assets or any contractual restriction binding on or affecting it or any of its assets;

(iv) **Consents.** All governmental and other consents that are required to have been obtained by it with respect to this Agreement or any Credit Support Document to which it is a party have been obtained and are in full force and effect and all conditions of any such consents have been complied with; and

(v) **Obligations Binding.** Its obligations under this Agreement and any Credit Support Document to which it is a party constitute its legal, valid and binding obligations, enforceable in accordance with their respective terms (subject to applicable bankruptcy, reorganisation, insolvency, moratorium or similar laws affecting creditors' rights generally and subject, as to enforceability, to equitable principles of general application (regardless of whether enforcement is sought in a proceeding in equity or at law)).

(b) **Absence of Certain Events.** No Event of Default or Potential Event of Default or, to its knowledge, Termination Event with respect to it has occurred and is continuing and no such event or circumstance would occur as a result of its entering into or performing its obligations under this Agreement or any Credit Support Document to which it is a party.

(c) **Absence of Litigation.** There is not pending or, to its knowledge, threatened against it, any of its Credit Support Providers or any of its applicable Specified Entities any action, suit or proceeding at law or in equity or before any court, tribunal, governmental body, agency or official or any arbitrator that is likely to affect the legality, validity or enforceability against it of this Agreement or any Credit Support Document to which it is a party or its ability to perform its obligations under this Agreement or such Credit Support Document.

(d) **Accuracy of Specified Information.** All applicable information that is furnished in writing by or on behalf of it to the other party and is identified for the purpose of this Section 3(d) in the Schedule is, as of the date of the information, true, accurate and complete in every material respect.

(e) **Payer Tax Representation.** Each representation specified in the Schedule as being made by it for the purpose of this Section 3(e) is accurate and true.

(f) **Payee Tax Representations.** Each representation specified in the Schedule as being made by it for the purpose of this Section 3(f) is accurate and true.

(g) **No Agency.** It is entering into this Agreement, including each Transaction, as principal and not as agent of any person or entity.

4. Agreements

Each party agrees with the other that, so long as either party has or may have any obligation under this Agreement or under any Credit Support Document to which it is a party:—

(a) **Furnish Specified Information.** It will deliver to the other party or, in certain cases under clause (iii) below, to such government or taxing authority as the other party reasonably directs:—

(i) any forms, documents or certificates relating to taxation specified in the Schedule or any Confirmation;

(ii) any other documents specified in the Schedule or any Confirmation; and

(iii) upon reasonable demand by such other party, any form or document that may be required or reasonably requested in writing in order to allow such other party or its Credit Support Provider to make a payment under this Agreement or any applicable Credit Support Document without any deduction or withholding for or on account of any Tax or with such deduction or withholding at a reduced rate (so long as the completion, execution or submission of such form or document would not materially prejudice the legal or commercial position of the party in receipt of such demand), with any such form or document to be accurate and completed in a manner reasonably satisfactory to such other party and to be executed and to be delivered with any reasonably required certification,

in each case by the date specified in the Schedule or such Confirmation or, if none is specified, as soon as reasonably practicable.

(b) **Maintain Authorisations.** It will use all reasonable efforts to maintain in full force and effect all consents of any governmental or other authority that are required to be obtained by it with respect to this Agreement or any Credit Support Document to which it is a party and will use all reasonable efforts to obtain any that may become necessary in the future.

(c) **Comply With Laws.** It will comply in all material respects with all applicable laws and orders to which it may be subject if failure so to comply would materially impair its ability to perform its obligations under this Agreement or any Credit Support Document to which it is a party.

(d) **Tax Agreement.** It will give notice of any failure of a representation made by it under Section 3(f) to be accurate and true promptly upon learning of such failure.

(e) **Payment of Stamp Tax.** Subject to Section 11, it will pay any Stamp Tax levied or imposed upon it or in respect of its execution or performance of this Agreement by a jurisdiction in which it is incorporated, organised, managed and controlled or considered to have its seat, or where an Office through which it is acting for the purpose of this Agreement is located ("Stamp Tax Jurisdiction"), and will indemnify the other party against any Stamp Tax levied or imposed upon the other party or in respect of the other party's execution or performance of this Agreement by any such Stamp Tax Jurisdiction which is not also a Stamp Tax Jurisdiction with respect to the other party.

5. Events of Default and Termination Events

(a) **Events of Default.** The occurrence at any time with respect to a party or, if applicable, any Credit Support Provider of such party or any Specified Entity of such party of any of the following events constitutes (subject to Sections 5(c) and 6(e)(iv)) an event of default (an "Event of Default") with respect to such party:—

(i) **Failure to Pay or Deliver.** Failure by the party to make, when due, any payment under this Agreement or delivery under Section 2(a)(i) or 9(h)(i)(2) or (4) required to be made by it if such failure is not remedied on or before the first Local Business Day in the case of any such payment or the first Local Delivery Day in the case of any such delivery after, in each case, notice of such failure is given to the party;

(ii) **Breach of Agreement; Repudiation of Agreement.**

(1) Failure by the party to comply with or perform any agreement or obligation (other than an obligation to make any payment under this Agreement or delivery under Section 2(a)(i) or 9(h)(i)(2) or (4) or to give notice of a Termination Event or any agreement or obligation under Section 4(a)(i), 4(a)(iii) or 4(d)) to be complied with or performed by the party in accordance with this Agreement if such failure is not remedied within 30 days after notice of such failure is given to the party; or

(2) the party disaffirms, disclaims, repudiates or rejects, in whole or in part, or challenges the validity of, this Master Agreement, any Confirmation executed and delivered by that party or any

Transaction evidenced by such a Confirmation (or such action is taken by any person or entity appointed or empowered to operate it or act on its behalf);

(iii) ***Credit Support Default.***

(1) Failure by the party or any Credit Support Provider of such party to comply with or perform any agreement or obligation to be complied with or performed by it in accordance with any Credit Support Document if such failure is continuing after any applicable grace period has elapsed;

(2) the expiration or termination of such Credit Support Document or the failing or ceasing of such Credit Support Document, or any security interest granted by such party or such Credit Support Provider to the other party pursuant to any such Credit Support Document, to be in full force and effect for the purpose of this Agreement (in each case other than in accordance with its terms) prior to the satisfaction of all obligations of such party under each Transaction to which such Credit Support Document relates without the written consent of the other party; or

(3) the party or such Credit Support Provider disaffirms, disclaims, repudiates or rejects, in whole or in part, or challenges the validity of, such Credit Support Document (or such action is taken by any person or entity appointed or empowered to operate it or act on its behalf);

(iv) ***Misrepresentation.*** A representation (other than a representation under Section 3(e) or 3(f)) made or repeated or deemed to have been made or repeated by the party or any Credit Support Provider of such party in this Agreement or any Credit Support Document proves to have been incorrect or misleading in any material respect when made or repeated or deemed to have been made or repeated;

(v) ***Default Under Specified Transaction.*** The party, any Credit Support Provider of such party or any applicable Specified Entity of such party:—

(1) defaults (other than by failing to make a delivery) under a Specified Transaction or any credit support arrangement relating to a Specified Transaction and, after giving effect to any applicable notice requirement or grace period, such default results in a liquidation of, an acceleration of obligations under, or an early termination of, that Specified Transaction;

(2) defaults, after giving effect to any applicable notice requirement or grace period, in making any payment due on the last payment or exchange date of, or any payment on early termination of, a Specified Transaction (or, if there is no applicable notice requirement or grace period, such default continues for at least one Local Business Day);

(3) defaults in making any delivery due under (including any delivery due on the last delivery or exchange date of) a Specified Transaction or any credit support arrangement relating to a Specified Transaction and, after giving effect to any applicable notice requirement or grace period, such default results in a liquidation of, an acceleration of obligations under, or an early termination of, all transactions outstanding under the documentation applicable to that Specified Transaction; or

(4) disaffirms, disclaims, repudiates or rejects, in whole or in part, or challenges the validity of, a Specified Transaction or any credit support arrangement relating to a Specified Transaction that is, in either case, confirmed or evidenced by a document or other confirming evidence executed and delivered by that party, Credit Support Provider or Specified Entity (or such action is taken by any person or entity appointed or empowered to operate it or act on its behalf);

(vi) **Cross-Default.** If "Cross-Default" is specified in the Schedule as applying to the party, the occurrence or existence of:—

(1) a default, event of default or other similar condition or event (however described) in respect of such party, any Credit Support Provider of such party or any applicable Specified Entity of such party under one or more agreements or instruments relating to Specified Indebtedness of any of them (individually or collectively) where the aggregate principal amount of such agreements or instruments, either alone or together with the amount, if any, referred to in clause (2) below, is not less than the applicable Threshold Amount (as specified in the Schedule) which has resulted in such Specified Indebtedness becoming, or becoming capable at such time of being declared, due and payable under such agreements or instruments before it would otherwise have been due and payable; or

(2) a default by such party, such Credit Support Provider or such Specified Entity (individually or collectively) in making one or more payments under such agreements or instruments on the due date for payment (after giving effect to any applicable notice requirement or grace period) in an aggregate amount, either alone or together with the amount, if any, referred to in clause (1) above, of not less than the applicable Threshold Amount;

(vii) **Bankruptcy.** The party, any Credit Support Provider of such party or any applicable Specified Entity of such party:—

(1) is dissolved (other than pursuant to a consolidation, amalgamation or merger); (2) becomes insolvent or is unable to pay its debts or fails or admits in writing its inability generally to pay its debts as they become due; (3) makes a general assignment, arrangement or composition with or for the benefit of its creditors; (4)(A) institutes or has instituted against it, by a regulator, supervisor or any similar official with primary insolvency, rehabilitative or regulatory jurisdiction over it in the jurisdiction of its incorporation or organisation or the jurisdiction of its head or home office, a proceeding seeking a judgment of insolvency or bankruptcy or any other relief under any bankruptcy or insolvency law or other similar law affecting creditors' rights, or a petition is presented for its winding-up or liquidation by it or such regulator, supervisor or similar official, or (B) has instituted against it a proceeding seeking a judgment of insolvency or bankruptcy or any other relief under any bankruptcy or insolvency law or other similar law affecting creditors' rights, or a petition is presented for its winding-up or liquidation, and such proceeding or petition is instituted or presented by a person or entity not described in clause (A) above and either (I) results in a judgment of insolvency or bankruptcy or the entry of an order for relief or the making of an order for its winding-up or liquidation or (II) is not dismissed, discharged, stayed or restrained in each case within 15 days of the institution or presentation thereof; (5) has a resolution passed for its winding-up, official management or liquidation (other than pursuant to a consolidation, amalgamation or merger); (6) seeks or becomes subject to the appointment of an administrator, provisional liquidator, conservator, receiver, trustee, custodian or other similar official for it or for all or substantially all its assets; (7) has a secured party take possession of all or substantially all its assets or has a distress, execution, attachment, sequestration or other legal process levied, enforced or sued on or against all or substantially all its assets and such secured party maintains possession, or any such process is not dismissed, discharged, stayed or restrained, in each case within 15 days thereafter; (8) causes or is subject to any event with respect to it which, under the applicable laws of any jurisdiction, has an analogous effect to any of the events specified in clauses (1) to (7) above (inclusive); or (9) takes any action in furtherance of, or indicating its consent to, approval of, or acquiescence in, any of the foregoing acts; or

(viii) **Merger Without Assumption.** The party or any Credit Support Provider of such party consolidates or amalgamates with, or merges with or into, or transfers all or substantially all its assets to, or reorganises, reincorporates or reconstitutes into or as, another entity and, at the time of such consolidation, amalgamation, merger, transfer, reorganisation, reincorporation or reconstitution:—

(1) the resulting, surviving or transferee entity fails to assume all the obligations of such party or such Credit Support Provider under this Agreement or any Credit Support Document to which it or its predecessor was a party; or

(2) the benefits of any Credit Support Document fail to extend (without the consent of the other party) to the performance by such resulting, surviving or transferee entity of its obligations under this Agreement.

(b) **Termination Events.** The occurrence at any time with respect to a party or, if applicable, any Credit Support Provider of such party or any Specified Entity of such party of any event specified below constitutes (subject to Section 5(c)) an Illegality if the event is specified in clause (i) below, a Force Majeure Event if the event is specified in clause (ii) below, a Tax Event if the event is specified in clause (iii) below, a Tax Event Upon Merger if the event is specified in clause (iv) below, and, if specified to be applicable, a Credit Event Upon Merger if the event is specified pursuant to clause (v) below or an Additional Termination Event if the event is specified pursuant to clause (vi) below:—

(i) **Illegality.** After giving effect to any applicable provision, disruption fallback or remedy specified in, or pursuant to, the relevant Confirmation or elsewhere in this Agreement, due to an event or circumstance (other than any action taken by a party or, if applicable, any Credit Support Provider of such party) occurring after a Transaction is entered into, it becomes unlawful under any applicable law (including without limitation the laws of any country in which payment, delivery or compliance is required by either party or any Credit Support Provider, as the case may be), on any day, or it would be unlawful if the relevant payment, delivery or compliance were required on that day (in each case, other than as a result of a breach by the party of Section 4(b)):—

(1) for the Office through which such party (which will be the Affected Party) makes and receives payments or deliveries with respect to such Transaction to perform any absolute or contingent obligation to make a payment or delivery in respect of such Transaction, to receive a payment or delivery in respect of such Transaction or to comply with any other material provision of this Agreement relating to such Transaction; or

(2) for such party or any Credit Support Provider of such party (which will be the Affected Party) to perform any absolute or contingent obligation to make a payment or delivery which such party or Credit Support Provider has under any Credit Support Document relating to such Transaction, to receive a payment or delivery under such Credit Support Document or to comply with any other material provision of such Credit Support Document;

(ii) **Force Majeure Event.** After giving effect to any applicable provision, disruption fallback or remedy specified in, or pursuant to, the relevant Confirmation or elsewhere in this Agreement, by reason of force majeure or act of state occurring after a Transaction is entered into, on any day:—

(1) the Office through which such party (which will be the Affected Party) makes and receives payments or deliveries with respect to such Transaction is prevented from performing any absolute or contingent obligation to make a payment or delivery in respect of such Transaction, from receiving a payment or delivery in respect of such Transaction or from complying with any other material provision of this Agreement relating to such Transaction (or would be so prevented if such payment, delivery or compliance were required on that day), or it becomes impossible or

impracticable for such Office so to perform, receive or comply (or it would be impossible or impracticable for such Office so to perform, receive or comply if such payment, delivery or compliance were required on that day); or

(2) such party or any Credit Support Provider of such party (which will be the Affected Party) is prevented from performing any absolute or contingent obligation to make a payment or delivery which such party or Credit Support Provider has under any Credit Support Document relating to such Transaction, from receiving a payment or delivery under such Credit Support Document or from complying with any other material provision of such Credit Support Document (or would be so prevented if such payment, delivery or compliance were required on that day), or it becomes impossible or impracticable for such party or Credit Support Provider so to perform, receive or comply (or it would be impossible or impracticable for such party or Credit Support Provider so to perform, receive or comply if such payment, delivery or compliance were required on that day),

so long as the force majeure or act of state is beyond the control of such Office, such party or such Credit Support Provider, as appropriate, and such Office, party or Credit Support Provider could not, after using all reasonable efforts (which will not require such party or Credit Support Provider to incur a loss, other than immaterial, incidental expenses), overcome such prevention, impossibility or impracticability;

(iii) **Tax Event.** Due to (1) any action taken by a taxing authority, or brought in a court of competent jurisdiction, after a Transaction is entered into (regardless of whether such action is taken or brought with respect to a party to this Agreement) or (2) a Change in Tax Law, the party (which will be the Affected Party) will, or there is a substantial likelihood that it will, on the next succeeding Scheduled Settlement Date (A) be required to pay to the other party an additional amount in respect of an Indemnifiable Tax under Section 2(d)(i)(4) (except in respect of interest under Section 9(h)) or (B) receive a payment from which an amount is required to be deducted or withheld for or on account of a Tax (except in respect of interest under Section 9(h)) and no additional amount is required to be paid in respect of such Tax under Section 2(d)(i)(4) (other than by reason of Section 2(d)(i)(4)(A) or (B));

(iv) **Tax Event Upon Merger.** The party (the "Burdened Party") on the next succeeding Scheduled Settlement Date will either (1) be required to pay an additional amount in respect of an Indemnifiable Tax under Section 2(d)(i)(4) (except in respect of interest under Section 9(h)) or (2) receive a payment from which an amount has been deducted or withheld for or on account of any Tax in respect of which the other party is not required to pay an additional amount (other than by reason of Section 2(d)(i)(4)(A) or (B)), in either case as a result of a party consolidating or amalgamating with, or merging with or into, or transferring all or substantially all its assets (or any substantial part of the assets comprising the business conducted by it as of the date of this Master Agreement) to, or reorganising, reincorporating or reconstituting into or as, another entity (which will be the Affected Party) where such action does not constitute a Merger Without Assumption;

(v) **Credit Event Upon Merger.** If "Credit Event Upon Merger" is specified in the Schedule as applying to the party, a Designated Event (as defined below) occurs with respect to such party, any Credit Support Provider of such party or any applicable Specified Entity of such party (in each case, "X") and such Designated Event does not constitute a Merger Without Assumption, and the creditworthiness of X or, if applicable, the successor, surviving or transferee entity of X, after taking into account any applicable Credit Support Document, is materially weaker immediately after the occurrence of such Designated Event than that of X immediately prior to the occurrence of such Designated Event (and, in any such event, such party or its successor, surviving or transferee entity, as appropriate, will be the Affected Party). A "Designated Event" with respect to X means that:—

(1) X consolidates or amalgamates with, or merges with or into, or transfers all or substantially all its assets (or any substantial part of the assets comprising the business conducted by X as of the

date of this Master Agreement) to, or reorganises, reincorporates or reconstitutes into or as, another entity;

(2) any person, related group of persons or entity acquires directly or indirectly the beneficial ownership of (A) equity securities having the power to elect a majority of the board of directors (or its equivalent) of X or (B) any other ownership interest enabling it to exercise control of X; or

(3) X effects any substantial change in its capital structure by means of the issuance, incurrence or guarantee of debt or the issuance of (A) preferred stock or other securities convertible into or exchangeable for debt or preferred stock or (B) in the case of entities other than corporations, any other form of ownership interest; or

(vi) **Additional Termination Event.** If any "Additional Termination Event" is specified in the Schedule or any Confirmation as applying, the occurrence of such event (and, in such event, the Affected Party or Affected Parties will be as specified for such Additional Termination Event in the Schedule or such Confirmation).

(c) **Hierarchy of Events.**

(i) An event or circumstance that constitutes or gives rise to an Illegality or a Force Majeure Event will not, for so long as that is the case, also constitute or give rise to an Event of Default under Section 5(a)(i), 5(a)(ii)(1) or 5(a)(iii)(1) insofar as such event or circumstance relates to the failure to make any payment or delivery or a failure to comply with any other material provision of this Agreement or a Credit Support Document, as the case may be.

(ii) Except in circumstances contemplated by clause (i) above, if an event or circumstance which would otherwise constitute or give rise to an Illegality or a Force Majeure Event also constitutes an Event of Default or any other Termination Event, it will be treated as an Event of Default or such other Termination Event, as the case may be, and will not constitute or give rise to an Illegality or a Force Majeure Event.

(iii) If an event or circumstance which would otherwise constitute or give rise to a Force Majeure Event also constitutes an Illegality, it will be treated as an Illegality, except as described in clause (ii) above, and not a Force Majeure Event.

(d) **Deferral of Payments and Deliveries During Waiting Period.** If an Illegality or a Force Majeure Event has occurred and is continuing with respect to a Transaction, each payment or delivery which would otherwise be required to be made under that Transaction will be deferred to, and will not be due until:—

(i) the first Local Business Day or, in the case of a delivery, the first Local Delivery Day (or the first day that would have been a Local Business Day or Local Delivery Day, as appropriate, but for the occurrence of the event or circumstance constituting or giving rise to that Illegality or Force Majeure Event) following the end of any applicable Waiting Period in respect of that Illegality or Force Majeure Event, as the case may be; or

(ii) if earlier, the date on which the event or circumstance constituting or giving rise to that Illegality or Force Majeure Event ceases to exist or, if such date is not a Local Business Day or, in the case of a delivery, a Local Delivery Day, the first following day that is a Local Business Day or Local Delivery Day, as appropriate.

(e) **Inability of Head or Home Office to Perform Obligations of Branch.** If (i) an Illegality or a Force Majeure Event occurs under Section 5(b)(i)(1) or 5(b)(ii)(1) and the relevant Office is not the Affected Party's head or home office, (ii) Section 10(a) applies, (iii) the other party seeks performance of the relevant obligation or

compliance with the relevant provision by the Affected Party's head or home office and (iv) the Affected Party's head or home office fails so to perform or comply due to the occurrence of an event or circumstance which would, if that head or home office were the Office through which the Affected Party makes and receives payments and deliveries with respect to the relevant Transaction, constitute or give rise to an Illegality or a Force Majeure Event, and such failure would otherwise constitute an Event of Default under Section 5(a)(i) or 5(a)(iii)(1) with respect to such party, then, for so long as the relevant event or circumstance continues to exist with respect to both the Office referred to in Section 5(b)(i)(1) or 5(b)(ii)(1), as the case may be, and the Affected Party's head or home office, such failure will not constitute an Event of Default under Section 5(a)(i) or 5(a)(iii)(1).

6. Early Termination; Close-Out Netting

(a) **Right to Terminate Following Event of Default.** If at any time an Event of Default with respect to a party (the "Defaulting Party") has occurred and is then continuing, the other party (the "Non-defaulting Party") may, by not more than 20 days notice to the Defaulting Party specifying the relevant Event of Default, designate a day not earlier than the day such notice is effective as an Early Termination Date in respect of all outstanding Transactions. If, however, "Automatic Early Termination" is specified in the Schedule as applying to a party, then an Early Termination Date in respect of all outstanding Transactions will occur immediately upon the occurrence with respect to such party of an Event of Default specified in Section 5(a)(vii)(1), (3), (5), (6) or, to the extent analogous thereto, (8), and as of the time immediately preceding the institution of the relevant proceeding or the presentation of the relevant petition upon the occurrence with respect to such party of an Event of Default specified in Section 5(a)(vii)(4) or, to the extent analogous thereto, (8).

(b) **Right to Terminate Following Termination Event.**

(i) **Notice.** If a Termination Event other than a Force Majeure Event occurs, an Affected Party will, promptly upon becoming aware of it, notify the other party, specifying the nature of that Termination Event and each Affected Transaction, and will also give the other party such other information about that Termination Event as the other party may reasonably require. If a Force Majeure Event occurs, each party will, promptly upon becoming aware of it, use all reasonable efforts to notify the other party, specifying the nature of that Force Majeure Event, and will also give the other party such other information about that Force Majeure Event as the other party may reasonably require.

(ii) **Transfer to Avoid Termination Event.** If a Tax Event occurs and there is only one Affected Party, or if a Tax Event Upon Merger occurs and the Burdened Party is the Affected Party, the Affected Party will, as a condition to its right to designate an Early Termination Date under Section 6(b)(iv), use all reasonable efforts (which will not require such party to incur a loss, other than immaterial, incidental expenses) to transfer within 20 days after it gives notice under Section 6(b)(i) all its rights and obligations under this Agreement in respect of the Affected Transactions to another of its Offices or Affiliates so that such Termination Event ceases to exist.

If the Affected Party is not able to make such a transfer it will give notice to the other party to that effect within such 20 day period, whereupon the other party may effect such a transfer within 30 days after the notice is given under Section 6(b)(i).

Any such transfer by a party under this Section 6(b)(ii) will be subject to and conditional upon the prior written consent of the other party, which consent will not be withheld if such other party's policies in effect at such time would permit it to enter into transactions with the transferee on the terms proposed.

(iii) **Two Affected Parties.** If a Tax Event occurs and there are two Affected Parties, each party will use all reasonable efforts to reach agreement within 30 days after notice of such occurrence is given under Section 6(b)(i) to avoid that Termination Event.

(iv) ***Right to Terminate.***

(1) If:—

(A) a transfer under Section 6(b)(ii) or an agreement under Section 6(b)(iii), as the case may be, has not been effected with respect to all Affected Transactions within 30 days after an Affected Party gives notice under Section 6(b)(i); or

(B) a Credit Event Upon Merger or an Additional Termination Event occurs, or a Tax Event Upon Merger occurs and the Burdened Party is not the Affected Party,

the Burdened Party in the case of a Tax Event Upon Merger, any Affected Party in the case of a Tax Event or an Additional Termination Event if there are two Affected Parties, or the Non-affected Party in the case of a Credit Event Upon Merger or an Additional Termination Event if there is only one Affected Party may, if the relevant Termination Event is then continuing, by not more than 20 days notice to the other party, designate a day not earlier than the day such notice is effective as an Early Termination Date in respect of all Affected Transactions.

(2) If at any time an Illegality or a Force Majeure Event has occurred and is then continuing and any applicable Waiting Period has expired:—

(A) Subject to clause (B) below, either party may, by not more than 20 days notice to the other party, designate (I) a day not earlier than the day on which such notice becomes effective as an Early Termination Date in respect of all Affected Transactions or (II) by specifying in that notice the Affected Transactions in respect of which it is designating the relevant day as an Early Termination Date, a day not earlier than two Local Business Days following the day on which such notice becomes effective as an Early Termination Date in respect of less than all Affected Transactions. Upon receipt of a notice designating an Early Termination Date in respect of less than all Affected Transactions, the other party may, by notice to the designating party, if such notice is effective on or before the day so designated, designate that same day as an Early Termination Date in respect of any or all other Affected Transactions.

(B) An Affected Party (if the Illegality or Force Majeure Event relates to performance by such party or any Credit Support Provider of such party of an obligation to make any payment or delivery under, or to compliance with any other material provision of, the relevant Credit Support Document) will only have the right to designate an Early Termination Date under Section 6(b)(iv)(2)(A) as a result of an Illegality under Section 5(b)(i)(2) or a Force Majeure Event under Section 5(b)(ii)(2) following the prior designation by the other party of an Early Termination Date, pursuant to Section 6(b)(iv)(2)(A), in respect of less than all Affected Transactions.

(c) ***Effect of Designation.***

(i) If notice designating an Early Termination Date is given under Section 6(a) or 6(b), the Early Termination Date will occur on the date so designated, whether or not the relevant Event of Default or Termination Event is then continuing.

(ii) Upon the occurrence or effective designation of an Early Termination Date, no further payments or deliveries under Section 2(a)(i) or 9(h)(i) in respect of the Terminated Transactions will be required to be made, but without prejudice to the other provisions of this Agreement. The amount, if any, payable in respect of an Early Termination Date will be determined pursuant to Sections 6(e) and 9(h)(ii).

(d) **Calculations; Payment Date.**

(i) **Statement.** On or as soon as reasonably practicable following the occurrence of an Early Termination Date, each party will make the calculations on its part, if any, contemplated by Section 6(e) and will provide to the other party a statement (1) showing, in reasonable detail, such calculations (including any quotations, market data or information from internal sources used in making such calculations), (2) specifying (except where there are two Affected Parties) any Early Termination Amount payable and (3) giving details of the relevant account to which any amount payable to it is to be paid. In the absence of written confirmation from the source of a quotation or market data obtained in determining a Close-out Amount, the records of the party obtaining such quotation or market data will be conclusive evidence of the existence and accuracy of such quotation or market data.

(ii) **Payment Date.** An Early Termination Amount due in respect of any Early Termination Date will, together with any amount of interest payable pursuant to Section 9(h)(ii)(2), be payable (1) on the day on which notice of the amount payable is effective in the case of an Early Termination Date which is designated or occurs as a result of an Event of Default and (2) on the day which is two Local Business Days after the day on which notice of the amount payable is effective (or, if there are two Affected Parties, after the day on which the statement provided pursuant to clause (i) above by the second party to provide such a statement is effective) in the case of an Early Termination Date which is designated as a result of a Termination Event.

(e) **Payments on Early Termination.** If an Early Termination Date occurs, the amount, if any, payable in respect of that Early Termination Date (the "Early Termination Amount") will be determined pursuant to this Section 6(e) and will be subject to Section 6(f).

(i) **Events of Default.** If the Early Termination Date results from an Event of Default, the Early Termination Amount will be an amount equal to (1) the sum of (A) the Termination Currency Equivalent of the Close-out Amount or Close-out Amounts (whether positive or negative) determined by the Non-defaulting Party for each Terminated Transaction or group of Terminated Transactions, as the case may be, and (B) the Termination Currency Equivalent of the Unpaid Amounts owing to the Non-defaulting Party less (2) the Termination Currency Equivalent of the Unpaid Amounts owing to the Defaulting Party. If the Early Termination Amount is a positive number, the Defaulting Party will pay it to the Non-defaulting Party; if it is a negative number, the Non-defaulting Party will pay the absolute value of the Early Termination Amount to the Defaulting Party.

(ii) **Termination Events.** If the Early Termination Date results from a Termination Event:—

(1) **One Affected Party.** Subject to clause (3) below, if there is one Affected Party, the Early Termination Amount will be determined in accordance with Section 6(e)(i), except that references to the Defaulting Party and to the Non-defaulting Party will be deemed to be references to the Affected Party and to the Non-affected Party, respectively.

(2) **Two Affected Parties.** Subject to clause (3) below, if there are two Affected Parties, each party will determine an amount equal to the Termination Currency Equivalent of the sum of the Close-out Amount or Close-out Amounts (whether positive or negative) for each Terminated Transaction or group of Terminated Transactions, as the case may be, and the Early Termination Amount will be an amount equal to (A) the sum of (I) one-half of the difference between the higher amount so determined (by party "X") and the lower amount so determined (by party "Y") and (II) the Termination Currency Equivalent of the Unpaid Amounts owing to X less (B) the Termination Currency Equivalent of the Unpaid Amounts owing to Y. If the Early Termination Amount is a positive number, Y will pay it to X; if it is a negative number, X will pay the absolute value of the Early Termination Amount to Y.

(3) *Mid-Market Events.* If that Termination Event is an Illegality or a Force Majeure Event, then the Early Termination Amount will be determined in accordance with clause (1) or (2) above, as appropriate, except that, for the purpose of determining a Close-out Amount or Close-out Amounts, the Determining Party will:—

(A) if obtaining quotations from one or more third parties (or from any of the Determining Party's Affiliates), ask each third party or Affiliate (I) not to take account of the current creditworthiness of the Determining Party or any existing Credit Support Document and (II) to provide mid-market quotations; and

(B) in any other case, use mid-market values without regard to the creditworthiness of the Determining Party.

(iii) *Adjustment for Bankruptcy.* In circumstances where an Early Termination Date occurs because Automatic Early Termination applies in respect of a party, the Early Termination Amount will be subject to such adjustments as are appropriate and permitted by applicable law to reflect any payments or deliveries made by one party to the other under this Agreement (and retained by such other party) during the period from the relevant Early Termination Date to the date for payment determined under Section 6(d)(ii).

(iv) *Adjustment for Illegality or Force Majeure Event.* The failure by a party or any Credit Support Provider of such party to pay, when due, any Early Termination Amount will not constitute an Event of Default under Section 5(a)(i) or 5(a)(iii)(1) if such failure is due to the occurrence of an event or circumstance which would, if it occurred with respect to payment, delivery or compliance related to a Transaction, constitute or give rise to an Illegality or a Force Majeure Event. Such amount will (1) accrue interest and otherwise be treated as an Unpaid Amount owing to the other party if subsequently an Early Termination Date results from an Event of Default, a Credit Event Upon Merger or an Additional Termination Event in respect of which all outstanding Transactions are Affected Transactions and (2) otherwise accrue interest in accordance with Section 9(h)(ii)(2).

(v) *Pre-Estimate.* The parties agree that an amount recoverable under this Section 6(e) is a reasonable pre-estimate of loss and not a penalty. Such amount is payable for the loss of bargain and the loss of protection against future risks, and, except as otherwise provided in this Agreement, neither party will be entitled to recover any additional damages as a consequence of the termination of the Terminated Transactions.

(f) *Set-Off.* Any Early Termination Amount payable to one party (the "Payee") by the other party (the "Payer"), in circumstances where there is a Defaulting Party or where there is one Affected Party in the case where either a Credit Event Upon Merger has occurred or any other Termination Event in respect of which all outstanding Transactions are Affected Transactions has occurred, will, at the option of the Non-defaulting Party or the Non-affected Party, as the case may be ("X") (and without prior notice to the Defaulting Party or the Affected Party, as the case may be), be reduced by its set-off against any other amounts ("Other Amounts") payable by the Payee to the Payer (whether or not arising under this Agreement, matured or contingent and irrespective of the currency, place of payment or place of booking of the obligation). To the extent that any Other Amounts are so set off, those Other Amounts will be discharged promptly and in all respects. X will give notice to the other party of any set-off effected under this Section 6(f).

For this purpose, either the Early Termination Amount or the Other Amounts (or the relevant portion of such amounts) may be converted by X into the currency in which the other is denominated at the rate of exchange at which such party would be able, in good faith and using commercially reasonable procedures, to purchase the relevant amount of such currency.

If an obligation is unascertained, X may in good faith estimate that obligation and set off in respect of the estimate, subject to the relevant party accounting to the other when the obligation is ascertained.

Nothing in this Section 6(f) will be effective to create a charge or other security interest. This Section 6(f) will be without prejudice and in addition to any right of set-off, offset, combination of accounts, lien, right of retention or withholding or similar right or requirement to which any party is at any time otherwise entitled or subject (whether by operation of law, contract or otherwise).

7. Transfer

Subject to Section 6(b)(ii) and to the extent permitted by applicable law, neither this Agreement nor any interest or obligation in or under this Agreement may be transferred (whether by way of security or otherwise) by either party without the prior written consent of the other party, except that:—

- (a) a party may make such a transfer of this Agreement pursuant to a consolidation or amalgamation with, or merger with or into, or transfer of all or substantially all its assets to, another entity (but without prejudice to any other right or remedy under this Agreement); and
- (b) a party may make such a transfer of all or any part of its interest in any Early Termination Amount payable to it by a Defaulting Party, together with any amounts payable on or with respect to that interest and any other rights associated with that interest pursuant to Sections 8, 9(h) and 11.

Any purported transfer that is not in compliance with this Section 7 will be void.

8. Contractual Currency

(a) **Payment in the Contractual Currency.** Each payment under this Agreement will be made in the relevant currency specified in this Agreement for that payment (the “Contractual Currency”). To the extent permitted by applicable law, any obligation to make payments under this Agreement in the Contractual Currency will not be discharged or satisfied by any tender in any currency other than the Contractual Currency, except to the extent such tender results in the actual receipt by the party to which payment is owed, acting in good faith and using commercially reasonable procedures in converting the currency so tendered into the Contractual Currency, of the full amount in the Contractual Currency of all amounts payable in respect of this Agreement. If for any reason the amount in the Contractual Currency so received falls short of the amount in the Contractual Currency payable in respect of this Agreement, the party required to make the payment will, to the extent permitted by applicable law, immediately pay such additional amount in the Contractual Currency as may be necessary to compensate for the shortfall. If for any reason the amount in the Contractual Currency so received exceeds the amount in the Contractual Currency payable in respect of this Agreement, the party receiving the payment will refund promptly the amount of such excess.

(b) **Judgments.** To the extent permitted by applicable law, if any judgment or order expressed in a currency other than the Contractual Currency is rendered (i) for the payment of any amount owing in respect of this Agreement, (ii) for the payment of any amount relating to any early termination in respect of this Agreement or (iii) in respect of a judgment or order of another court for the payment of any amount described in clause (i) or (ii) above, the party seeking recovery, after recovery in full of the aggregate amount to which such party is entitled pursuant to the judgment or order, will be entitled to receive immediately from the other party the amount of any shortfall of the Contractual Currency received by such party as a consequence of sums paid in such other currency and will refund promptly to the other party any excess of the Contractual Currency received by such party as a consequence of sums paid in such other currency if such shortfall or such excess arises or results from any variation between the rate of exchange at which the Contractual Currency is converted into the currency of the judgment or order for the purpose of such judgment or order and the rate of exchange at which such party is able, acting in good faith and using

commercially reasonable procedures in converting the currency received into the Contractual Currency, to purchase the Contractual Currency with the amount of the currency of the judgment or order actually received by such party.

(c) **Separate Indemnities.** To the extent permitted by applicable law, the indemnities in this Section 8 constitute separate and independent obligations from the other obligations in this Agreement, will be enforceable as separate and independent causes of action, will apply notwithstanding any indulgence granted by the party to which any payment is owed and will not be affected by judgment being obtained or claim or proof being made for any other sums payable in respect of this Agreement.

(d) **Evidence of Loss.** For the purpose of this Section 8, it will be sufficient for a party to demonstrate that it would have suffered a loss had an actual exchange or purchase been made.

9. Miscellaneous

(a) **Entire Agreement.** This Agreement constitutes the entire agreement and understanding of the parties with respect to its subject matter. Each of the parties acknowledges that in entering into this Agreement it has not relied on any oral or written representation, warranty or other assurance (except as provided for or referred to in this Agreement) and waives all rights and remedies which might otherwise be available to it in respect thereof, except that nothing in this Agreement will limit or exclude any liability of a party for fraud.

(b) **Amendments.** An amendment, modification or waiver in respect of this Agreement will only be effective if in writing (including a writing evidenced by a facsimile transmission) and executed by each of the parties or confirmed by an exchange of telexes or by an exchange of electronic messages on an electronic messaging system.

(c) **Survival of Obligations.** Without prejudice to Sections 2(a)(iii) and 6(c)(ii), the obligations of the parties under this Agreement will survive the termination of any Transaction.

(d) **Remedies Cumulative.** Except as provided in this Agreement, the rights, powers, remedies and privileges provided in this Agreement are cumulative and not exclusive of any rights, powers, remedies and privileges provided by law.

(e) Counterparts and Confirmations.

(i) This Agreement (and each amendment, modification and waiver in respect of it) may be executed and delivered in counterparts (including by facsimile transmission and by electronic messaging system), each of which will be deemed an original.

(ii) The parties intend that they are legally bound by the terms of each Transaction from the moment they agree to those terms (whether orally or otherwise). A Confirmation will be entered into as soon as practicable and may be executed and delivered in counterparts (including by facsimile transmission) or be created by an exchange of telexes, by an exchange of electronic messages on an electronic messaging system or by an exchange of e-mails, which in each case will be sufficient for all purposes to evidence a binding supplement to this Agreement. The parties will specify therein or through another effective means that any such counterpart, telex, electronic message or e-mail constitutes a Confirmation.

(f) **No Waiver of Rights.** A failure or delay in exercising any right, power or privilege in respect of this Agreement will not be presumed to operate as a waiver, and a single or partial exercise of any right, power or privilege will not be presumed to preclude any subsequent or further exercise, of that right, power or privilege or the exercise of any other right, power or privilege.

(g) **Headings.** The headings used in this Agreement are for convenience of reference only and are not to affect the construction of or to be taken into consideration in interpreting this Agreement.

(h) ***Interest and Compensation.***

(i) ***Prior to Early Termination.*** Prior to the occurrence or effective designation of an Early Termination Date in respect of the relevant Transaction:—

(1) ***Interest on Defaulted Payments.*** If a party defaults in the performance of any payment obligation, it will, to the extent permitted by applicable law and subject to Section 6(c), pay interest (before as well as after judgment) on the overdue amount to the other party on demand in the same currency as the overdue amount, for the period from (and including) the original due date for payment to (but excluding) the date of actual payment (and excluding any period in respect of which interest or compensation in respect of the overdue amount is due pursuant to clause (3)(B) or (C) below), at the Default Rate.

(2) ***Compensation for Defaulted Deliveries.*** If a party defaults in the performance of any obligation required to be settled by delivery, it will on demand (A) compensate the other party to the extent provided for in the relevant Confirmation or elsewhere in this Agreement and (B) unless otherwise provided in the relevant Confirmation or elsewhere in this Agreement, to the extent permitted by applicable law and subject to Section 6(c), pay to the other party interest (before as well as after judgment) on an amount equal to the fair market value of that which was required to be delivered in the same currency as that amount, for the period from (and including) the originally scheduled date for delivery to (but excluding) the date of actual delivery (and excluding any period in respect of which interest or compensation in respect of that amount is due pursuant to clause (4) below), at the Default Rate. The fair market value of any obligation referred to above will be determined as of the originally scheduled date for delivery, in good faith and using commercially reasonable procedures, by the party that was entitled to take delivery.

(3) ***Interest on Deferred Payments.*** If:—

(A) a party does not pay any amount that, but for Section 2(a)(iii), would have been payable, it will, to the extent permitted by applicable law and subject to Section 6(c) and clauses (B) and (C) below, pay interest (before as well as after judgment) on that amount to the other party on demand (after such amount becomes payable) in the same currency as that amount, for the period from (and including) the date the amount would, but for Section 2(a)(iii), have been payable to (but excluding) the date the amount actually becomes payable, at the Applicable Deferral Rate;

(B) a payment is deferred pursuant to Section 5(d), the party which would otherwise have been required to make that payment will, to the extent permitted by applicable law, subject to Section 6(c) and for so long as no Event of Default or Potential Event of Default with respect to that party has occurred and is continuing, pay interest (before as well as after judgment) on the amount of the deferred payment to the other party on demand (after such amount becomes payable) in the same currency as the deferred payment, for the period from (and including) the date the amount would, but for Section 5(d), have been payable to (but excluding) the earlier of the date the payment is no longer deferred pursuant to Section 5(d) and the date during the deferral period upon which an Event of Default or Potential Event of Default with respect to that party occurs, at the Applicable Deferral Rate; or

(C) a party fails to make any payment due to the occurrence of an Illegality or a Force Majeure Event (after giving effect to any deferral period contemplated by clause (B) above), it will, to the extent permitted by applicable law, subject to Section 6(c) and for so long as the event or circumstance giving rise to that Illegality or Force Majeure Event

continues and no Event of Default or Potential Event of Default with respect to that party has occurred and is continuing, pay interest (before as well as after judgment) on the overdue amount to the other party on demand in the same currency as the overdue amount, for the period from (and including) the date the party fails to make the payment due to the occurrence of the relevant Illegality or Force Majeure Event (or, if later, the date the payment is no longer deferred pursuant to Section 5(d)) to (but excluding) the earlier of the date the event or circumstance giving rise to that Illegality or Force Majeure Event ceases to exist and the date during the period upon which an Event of Default or Potential Event of Default with respect to that party occurs (and excluding any period in respect of which interest or compensation in respect of the overdue amount is due pursuant to clause (B) above), at the Applicable Deferral Rate.

(4) *Compensation for Deferred Deliveries.* If:—

(A) a party does not perform any obligation that, but for Section 2(a)(iii), would have been required to be settled by delivery;

(B) a delivery is deferred pursuant to Section 5(d); or

(C) a party fails to make a delivery due to the occurrence of an Illegality or a Force Majeure Event at a time when any applicable Waiting Period has expired,

the party required (or that would otherwise have been required) to make the delivery will, to the extent permitted by applicable law and subject to Section 6(c), compensate and pay interest to the other party on demand (after, in the case of clauses (A) and (B) above, such delivery is required) if and to the extent provided for in the relevant Confirmation or elsewhere in this Agreement.

(ii) *Early Termination.* Upon the occurrence or effective designation of an Early Termination Date in respect of a Transaction:—

(1) *Unpaid Amounts.* For the purpose of determining an Unpaid Amount in respect of the relevant Transaction, and to the extent permitted by applicable law, interest will accrue on the amount of any payment obligation or the amount equal to the fair market value of any obligation required to be settled by delivery included in such determination in the same currency as that amount, for the period from (and including) the date the relevant obligation was (or would have been but for Section 2(a)(iii) or 5(d)) required to have been performed to (but excluding) the relevant Early Termination Date, at the Applicable Close-out Rate.

(2) *Interest on Early Termination Amounts.* If an Early Termination Amount is due in respect of such Early Termination Date, that amount will, to the extent permitted by applicable law, be paid together with interest (before as well as after judgment) on that amount in the Termination Currency, for the period from (and including) such Early Termination Date to (but excluding) the date the amount is paid, at the Applicable Close-out Rate.

(iii) *Interest Calculation.* Any interest pursuant to this Section 9(h) will be calculated on the basis of daily compounding and the actual number of days elapsed.

10. Offices; Multibranch Parties

(a) If Section 10(a) is specified in the Schedule as applying, each party that enters into a Transaction through an Office other than its head or home office represents to and agrees with the other party that, notwithstanding the place of booking or its jurisdiction of incorporation or organisation, its obligations are the same in terms of recourse against it as if it had entered into the Transaction through its head or home office, except that a party will not have recourse to the head or home office of the other party in respect of any payment or delivery deferred pursuant to Section 5(d) for so long as the payment or delivery is so deferred. This representation and agreement will be deemed to be repeated by each party on each date on which the parties enter into a Transaction.

(b) If a party is specified as a Multibranch Party in the Schedule, such party may, subject to clause (c) below, enter into a Transaction through, book a Transaction in and make and receive payments and deliveries with respect to a Transaction through any Office listed in respect of that party in the Schedule (but not any other Office unless otherwise agreed by the parties in writing).

(c) The Office through which a party enters into a Transaction will be the Office specified for that party in the relevant Confirmation or as otherwise agreed by the parties in writing, and, if an Office for that party is not specified in the Confirmation or otherwise agreed by the parties in writing, its head or home office. Unless the parties otherwise agree in writing, the Office through which a party enters into a Transaction will also be the Office in which it books the Transaction and the Office through which it makes and receives payments and deliveries with respect to the Transaction. Subject to Section 6(b)(ii), neither party may change the Office in which it books the Transaction or the Office through which it makes and receives payments or deliveries with respect to a Transaction without the prior written consent of the other party.

11. Expenses

A Defaulting Party will on demand indemnify and hold harmless the other party for and against all reasonable out-of-pocket expenses, including legal fees, execution fees and Stamp Tax, incurred by such other party by reason of the enforcement and protection of its rights under this Agreement or any Credit Support Document to which the Defaulting Party is a party or by reason of the early termination of any Transaction, including, but not limited to, costs of collection.

12. Notices

(a) **Effectiveness.** Any notice or other communication in respect of this Agreement may be given in any manner described below (except that a notice or other communication under Section 5 or 6 may not be given by electronic messaging system or e-mail) to the address or number or in accordance with the electronic messaging system or e-mail details provided (see the Schedule) and will be deemed effective as indicated:—

- (i) if in writing and delivered in person or by courier, on the date it is delivered;
- (ii) if sent by telex, on the date the recipient's answerback is received;
- (iii) if sent by facsimile transmission, on the date it is received by a responsible employee of the recipient in legible form (it being agreed that the burden of proving receipt will be on the sender and will not be met by a transmission report generated by the sender's facsimile machine);
- (iv) if sent by certified or registered mail (airmail, if overseas) or the equivalent (return receipt requested), on the date it is delivered or its delivery is attempted;
- (v) if sent by electronic messaging system, on the date it is received; or

(vi) if sent by e-mail, on the date it is delivered,

unless the date of that delivery (or attempted delivery) or that receipt, as applicable, is not a Local Business Day or that communication is delivered (or attempted) or received, as applicable, after the close of business on a Local Business Day, in which case that communication will be deemed given and effective on the first following day that is a Local Business Day.

(b) **Change of Details.** Either party may by notice to the other change the address, telex or facsimile number or electronic messaging system or e-mail details at which notices or other communications are to be given to it.

13. Governing Law and Jurisdiction

(a) **Governing Law.** This Agreement will be governed by and construed in accordance with the law specified in the Schedule.

(b) **Jurisdiction.** With respect to any suit, action or proceedings relating to any dispute arising out of or in connection with this Agreement ("Proceedings"), each party irrevocably:—

(i) submits:—

(1) if this Agreement is expressed to be governed by English law, to (A) the non-exclusive jurisdiction of the English courts if the Proceedings do not involve a Convention Court and (B) the exclusive jurisdiction of the English courts if the Proceedings do involve a Convention Court; or

(2) if this Agreement is expressed to be governed by the laws of the State of New York, to the non-exclusive jurisdiction of the courts of the State of New York and the United States District Court located in the Borough of Manhattan in New York City;

(ii) waives any objection which it may have at any time to the laying of venue of any Proceedings brought in any such court, waives any claim that such Proceedings have been brought in an inconvenient forum and further waives the right to object, with respect to such Proceedings, that such court does not have any jurisdiction over such party; and

(iii) agrees, to the extent permitted by applicable law, that the bringing of Proceedings in any one or more jurisdictions will not preclude the bringing of Proceedings in any other jurisdiction.

(c) **Service of Process.** Each party irrevocably appoints the Process Agent, if any, specified opposite its name in the Schedule to receive, for it and on its behalf, service of process in any Proceedings. If for any reason any party's Process Agent is unable to act as such, such party will promptly notify the other party and within 30 days appoint a substitute process agent acceptable to the other party. The parties irrevocably consent to service of process given in the manner provided for notices in Section 12(a)(i), 12(a)(iii) or 12(a)(iv). Nothing in this Agreement will affect the right of either party to serve process in any other manner permitted by applicable law.

(d) **Waiver of Immunities.** Each party irrevocably waives, to the extent permitted by applicable law, with respect to itself and its revenues and assets (irrespective of their use or intended use), all immunity on the grounds of sovereignty or other similar grounds from (i) suit, (ii) jurisdiction of any court, (iii) relief by way of injunction or order for specific performance or recovery of property, (iv) attachment of its assets (whether before or after judgment) and (v) execution or enforcement of any judgment to which it or its revenues or assets might otherwise be entitled in any Proceedings in the courts of any jurisdiction and irrevocably agrees, to the extent permitted by applicable law, that it will not claim any such immunity in any Proceedings.

14. Definitions

As used in this Agreement:—

“*Additional Representation*” has the meaning specified in Section 3.

“*Additional Termination Event*” has the meaning specified in Section 5(b).

“*Affected Party*” has the meaning specified in Section 5(b).

“*Affected Transactions*” means (a) with respect to any Termination Event consisting of an Illegality, Force Majeure Event, Tax Event or Tax Event Upon Merger, all Transactions affected by the occurrence of such Termination Event (which, in the case of an Illegality under Section 5(b)(i)(2) or a Force Majeure Event under Section 5(b)(ii)(2), means all Transactions unless the relevant Credit Support Document references only certain Transactions, in which case those Transactions and, if the relevant Credit Support Document constitutes a Confirmation for a Transaction, that Transaction) and (b) with respect to any other Termination Event, all Transactions.

“*Affiliate*” means, subject to the Schedule, in relation to any person, any entity controlled, directly or indirectly, by the person, any entity that controls, directly or indirectly, the person or any entity directly or indirectly under common control with the person. For this purpose, “control” of any entity or person means ownership of a majority of the voting power of the entity or person.

“*Agreement*” has the meaning specified in Section 1(c).

“*Applicable Close-out Rate*” means:—

(a) in respect of the determination of an Unpaid Amount:—

(i) in respect of obligations payable or deliverable (or which would have been but for Section 2(a)(iii)) by a Defaulting Party, the Default Rate;

(ii) in respect of obligations payable or deliverable (or which would have been but for Section 2(a)(iii)) by a Non-defaulting Party, the Non-default Rate;

(iii) in respect of obligations deferred pursuant to Section 5(d), if there is no Defaulting Party and for so long as the deferral period continues, the Applicable Deferral Rate; and

(iv) in all other cases following the occurrence of a Termination Event (except where interest accrues pursuant to clause (iii) above), the Applicable Deferral Rate; and

(b) in respect of an Early Termination Amount:—

(i) for the period from (and including) the relevant Early Termination Date to (but excluding) the date (determined in accordance with Section 6(d)(ii)) on which that amount is payable:—

(1) if the Early Termination Amount is payable by a Defaulting Party, the Default Rate;

(2) if the Early Termination Amount is payable by a Non-defaulting Party, the Non-default Rate; and

(3) in all other cases, the Applicable Deferral Rate; and

(ii) for the period from (and including) the date (determined in accordance with Section 6(d)(ii)) on which that amount is payable to (but excluding) the date of actual payment:—

(1) if a party fails to pay the Early Termination Amount due to the occurrence of an event or circumstance which would, if it occurred with respect to a payment or delivery under a Transaction, constitute or give rise to an Illegality or a Force Majeure Event, and for so long as the Early Termination Amount remains unpaid due to the continuing existence of such event or circumstance, the Applicable Deferral Rate;

(2) if the Early Termination Amount is payable by a Defaulting Party (but excluding any period in respect of which clause (1) above applies), the Default Rate;

(3) if the Early Termination Amount is payable by a Non-defaulting Party (but excluding any period in respect of which clause (1) above applies), the Non-default Rate; and

(4) in all other cases, the Termination Rate.

“Applicable Deferral Rate” means:—

(a) for the purpose of Section 9(h)(i)(3)(A), the rate certified by the relevant payer to be a rate offered to the payer by a major bank in a relevant interbank market for overnight deposits in the applicable currency, such bank to be selected in good faith by the payer for the purpose of obtaining a representative rate that will reasonably reflect conditions prevailing at the time in that relevant market;

(b) for purposes of Section 9(h)(i)(3)(B) and clause (a)(iii) of the definition of Applicable Close-out Rate, the rate certified by the relevant payer to be a rate offered to prime banks by a major bank in a relevant interbank market for overnight deposits in the applicable currency, such bank to be selected in good faith by the payer after consultation with the other party, if practicable, for the purpose of obtaining a representative rate that will reasonably reflect conditions prevailing at the time in that relevant market; and

(c) for purposes of Section 9(h)(i)(3)(C) and clauses (a)(iv), (b)(i)(3) and (b)(ii)(1) of the definition of Applicable Close-out Rate, a rate equal to the arithmetic mean of the rate determined pursuant to clause (a) above and a rate per annum equal to the cost (without proof or evidence of any actual cost) to the relevant payee (as certified by it) if it were to fund or of funding the relevant amount.

“Automatic Early Termination” has the meaning specified in Section 6(a).

“Burdened Party” has the meaning specified in Section 5(b)(iv).

“Change in Tax Law” means the enactment, promulgation, execution or ratification of, or any change in or amendment to, any law (or in the application or official interpretation of any law) that occurs after the parties enter into the relevant Transaction.

“Close-out Amount” means, with respect to each Terminated Transaction or each group of Terminated Transactions and a Determining Party, the amount of the losses or costs of the Determining Party that are or would be incurred under then prevailing circumstances (expressed as a positive number) or gains of the Determining Party that are or would be realised under then prevailing circumstances (expressed as a negative number) in replacing, or in providing for the Determining Party the economic equivalent of, (a) the material terms of that Terminated Transaction or group of Terminated Transactions, including the payments and deliveries by the parties under Section 2(a)(i) in respect of that Terminated Transaction or group of Terminated Transactions that would, but for the occurrence of the relevant Early Termination Date, have been required after that date (assuming satisfaction of the conditions precedent in

Section 2(a)(iii)) and (b) the option rights of the parties in respect of that Terminated Transaction or group of Terminated Transactions.

Any Close-out Amount will be determined by the Determining Party (or its agent), which will act in good faith and use commercially reasonable procedures in order to produce a commercially reasonable result. The Determining Party may determine a Close-out Amount for any group of Terminated Transactions or any individual Terminated Transaction but, in the aggregate, for not less than all Terminated Transactions. Each Close-out Amount will be determined as of the Early Termination Date or, if that would not be commercially reasonable, as of the date or dates following the Early Termination Date as would be commercially reasonable.

Unpaid Amounts in respect of a Terminated Transaction or group of Terminated Transactions and legal fees and out-of-pocket expenses referred to in Section 11 are to be excluded in all determinations of Close-out Amounts.

In determining a Close-out Amount, the Determining Party may consider any relevant information, including, without limitation, one or more of the following types of information:—

- (i) quotations (either firm or indicative) for replacement transactions supplied by one or more third parties that may take into account the creditworthiness of the Determining Party at the time the quotation is provided and the terms of any relevant documentation, including credit support documentation, between the Determining Party and the third party providing the quotation;
- (ii) information consisting of relevant market data in the relevant market supplied by one or more third parties including, without limitation, relevant rates, prices, yields, yield curves, volatilities, spreads, correlations or other relevant market data in the relevant market; or
- (iii) information of the types described in clause (i) or (ii) above from internal sources (including any of the Determining Party's Affiliates) if that information is of the same type used by the Determining Party in the regular course of its business for the valuation of similar transactions.

The Determining Party will consider, taking into account the standards and procedures described in this definition, quotations pursuant to clause (i) above or relevant market data pursuant to clause (ii) above unless the Determining Party reasonably believes in good faith that such quotations or relevant market data are not readily available or would produce a result that would not satisfy those standards. When considering information described in clause (i), (ii) or (iii) above, the Determining Party may include costs of funding, to the extent costs of funding are not and would not be a component of the other information being utilised. Third parties supplying quotations pursuant to clause (i) above or market data pursuant to clause (ii) above may include, without limitation, dealers in the relevant markets, end-users of the relevant product, information vendors, brokers and other sources of market information.

Without duplication of amounts calculated based on information described in clause (i), (ii) or (iii) above, or other relevant information, and when it is commercially reasonable to do so, the Determining Party may in addition consider in calculating a Close-out Amount any loss or cost incurred in connection with its terminating, liquidating or re-establishing any hedge related to a Terminated Transaction or group of Terminated Transactions (or any gain resulting from any of them).

Commercially reasonable procedures used in determining a Close-out Amount may include the following:—

- (1) application to relevant market data from third parties pursuant to clause (ii) above or information from internal sources pursuant to clause (iii) above of pricing or other valuation models that are, at the time of the determination of the Close-out Amount, used by the Determining Party in the regular course of its business in pricing or valuing transactions between the Determining Party and unrelated third parties that are similar to the Terminated Transaction or group of Terminated Transactions; and

(2) application of different valuation methods to Terminated Transactions or groups of Terminated Transactions depending on the type, complexity, size or number of the Terminated Transactions or group of Terminated Transactions.

“*Confirmation*” has the meaning specified in the preamble.

“*consent*” includes a consent, approval, action, authorisation, exemption, notice, filing, registration or exchange control consent.

“*Contractual Currency*” has the meaning specified in Section 8(a).

“*Convention Court*” means any court which is bound to apply to the Proceedings either Article 17 of the 1968 Brussels Convention on Jurisdiction and the Enforcement of Judgments in Civil and Commercial Matters or Article 17 of the 1988 Lugano Convention on Jurisdiction and the Enforcement of Judgments in Civil and Commercial Matters.

“*Credit Event Upon Merger*” has the meaning specified in Section 5(b).

“*Credit Support Document*” means any agreement or instrument that is specified as such in this Agreement.

“*Credit Support Provider*” has the meaning specified in the Schedule.

“*Cross-Default*” means the event specified in Section 5(a)(vi).

“*Default Rate*” means a rate per annum equal to the cost (without proof or evidence of any actual cost) to the relevant payee (as certified by it) if it were to fund or of funding the relevant amount plus 1% per annum.

“*Defaulting Party*” has the meaning specified in Section 6(a).

“*Designated Event*” has the meaning specified in Section 5(b)(v).

“*Determining Party*” means the party determining a Close-out Amount.

“*Early Termination Amount*” has the meaning specified in Section 6(e).

“*Early Termination Date*” means the date determined in accordance with Section 6(a) or 6(b)(iv).

“*electronic messages*” does not include e-mails but does include documents expressed in markup languages, and “*electronic messaging system*” will be construed accordingly.

“*English law*” means the law of England and Wales, and “*English*” will be construed accordingly.

“*Event of Default*” has the meaning specified in Section 5(a) and, if applicable, in the Schedule.

“*Force Majeure Event*” has the meaning specified in Section 5(b).

“*General Business Day*” means a day on which commercial banks are open for general business (including dealings in foreign exchange and foreign currency deposits).

“*Illegality*” has the meaning specified in Section 5(b).

“Indemnifiable Tax” means any Tax other than a Tax that would not be imposed in respect of a payment under this Agreement but for a present or former connection between the jurisdiction of the government or taxation authority imposing such Tax and the recipient of such payment or a person related to such recipient (including, without limitation, a connection arising from such recipient or related person being or having been a citizen or resident of such jurisdiction, or being or having been organised, present or engaged in a trade or business in such jurisdiction, or having or having had a permanent establishment or fixed place of business in such jurisdiction, but excluding a connection arising solely from such recipient or related person having executed, delivered, performed its obligations or received a payment under, or enforced, this Agreement or a Credit Support Document).

“law” includes any treaty, law, rule or regulation (as modified, in the case of tax matters, by the practice of any relevant governmental revenue authority), and **“unlawful”** will be construed accordingly.

“Local Business Day” means (a) in relation to any obligation under Section 2(a)(i), a General Business Day in the place or places specified in the relevant Confirmation and a day on which a relevant settlement system is open or operating as specified in the relevant Confirmation or, if a place or a settlement system is not so specified, as otherwise agreed by the parties in writing or determined pursuant to provisions contained, or incorporated by reference, in this Agreement, (b) for the purpose of determining when a Waiting Period expires, a General Business Day in the place where the event or circumstance that constitutes or gives rise to the Illegality or Force Majeure Event, as the case may be, occurs, (c) in relation to any other payment, a General Business Day in the place where the relevant account is located and, if different, in the principal financial centre, if any, of the currency of such payment and, if that currency does not have a single recognised principal financial centre, a day on which the settlement system necessary to accomplish such payment is open, (d) in relation to any notice or other communication, including notice contemplated under Section 5(a)(i), a General Business Day (or a day that would have been a General Business Day but for the occurrence of an event or circumstance which would, if it occurred with respect to payment, delivery or compliance related to a Transaction, constitute or give rise to an Illegality or a Force Majeure Event) in the place specified in the address for notice provided by the recipient and, in the case of a notice contemplated by Section 2(b), in the place where the relevant new account is to be located and (e) in relation to Section 5(a)(v)(2), a General Business Day in the relevant locations for performance with respect to such Specified Transaction.

“Local Delivery Day” means, for purposes of Sections 5(a)(i) and 5(d), a day on which settlement systems necessary to accomplish the relevant delivery are generally open for business so that the delivery is capable of being accomplished in accordance with customary market practice, in the place specified in the relevant Confirmation or, if not so specified, in a location as determined in accordance with customary market practice for the relevant delivery.

“Master Agreement” has the meaning specified in the preamble.

“Merger Without Assumption” means the event specified in Section 5(a)(viii).

“Multiple Transaction Payment Netting” has the meaning specified in Section 2(c).

“Non-affected Party” means, so long as there is only one Affected Party, the other party.

“Non-default Rate” means the rate certified by the Non-defaulting Party to be a rate offered to the Non-defaulting Party by a major bank in a relevant interbank market for overnight deposits in the applicable currency, such bank to be selected in good faith by the Non-defaulting Party for the purpose of obtaining a representative rate that will reasonably reflect conditions prevailing at the time in that relevant market.

“Non-defaulting Party” has the meaning specified in Section 6(a).

“Office” means a branch or office of a party, which may be such party’s head or home office.

“Other Amounts” has the meaning specified in Section 6(f).

“Payee” has the meaning specified in Section 6(f).

“Payer” has the meaning specified in Section 6(f).

“Potential Event of Default” means any event which, with the giving of notice or the lapse of time or both, would constitute an Event of Default.

“Proceedings” has the meaning specified in Section 13(b).

“Process Agent” has the meaning specified in the Schedule.

“rate of exchange” includes, without limitation, any premiums and costs of exchange payable in connection with the purchase of or conversion into the Contractual Currency.

“Relevant Jurisdiction” means, with respect to a party, the jurisdictions (a) in which the party is incorporated, organised, managed and controlled or considered to have its seat, (b) where an Office through which the party is acting for purposes of this Agreement is located, (c) in which the party executes this Agreement and (d) in relation to any payment, from or through which such payment is made.

“Schedule” has the meaning specified in the preamble.

“Scheduled Settlement Date” means a date on which a payment or delivery is to be made under Section 2(a)(i) with respect to a Transaction.

“Specified Entity” has the meaning specified in the Schedule.

“Specified Indebtedness” means, subject to the Schedule, any obligation (whether present or future, contingent or otherwise, as principal or surety or otherwise) in respect of borrowed money.

“Specified Transaction” means, subject to the Schedule, (a) any transaction (including an agreement with respect to any such transaction) now existing or hereafter entered into between one party to this Agreement (or any Credit Support Provider of such party or any applicable Specified Entity of such party) and the other party to this Agreement (or any Credit Support Provider of such other party or any applicable Specified Entity of such other party) which is not a Transaction under this Agreement but (i) which is a rate swap transaction, swap option, basis swap, forward rate transaction, commodity swap, commodity option, equity or equity index swap, equity or equity index option, bond option, interest rate option, foreign exchange transaction, cap transaction, floor transaction, collar transaction, currency swap transaction, cross-currency rate swap transaction, currency option, credit protection transaction, credit swap, credit default swap, credit default option, total return swap, credit spread transaction, repurchase transaction, reverse repurchase transaction, buy/sell-back transaction, securities lending transaction, weather index transaction or forward purchase or sale of a security, commodity or other financial instrument or interest (including any option with respect to any of these transactions) or (ii) which is a type of transaction that is similar to any transaction referred to in clause (i) above that is currently, or in the future becomes, recurrently entered into in the financial markets (including terms and conditions incorporated by reference in such agreement) and which is a forward, swap, future, option or other derivative on one or more rates, currencies, commodities, equity securities or other equity instruments, debt securities or other debt instruments, economic indices or measures of economic risk or value, or other benchmarks against which payments or deliveries are to be made, (b) any combination of these transactions and (c) any other transaction identified as a Specified Transaction in this Agreement or the relevant confirmation.

“Stamp Tax” means any stamp, registration, documentation or similar tax.

“Stamp Tax Jurisdiction” has the meaning specified in Section 4(e).

“Tax” means any present or future tax, levy, impost, duty, charge, assessment or fee of any nature (including interest, penalties and additions thereto) that is imposed by any government or other taxing authority in respect of any payment under this Agreement other than a stamp, registration, documentation or similar tax.

“Tax Event” has the meaning specified in Section 5(b).

“Tax Event Upon Merger” has the meaning specified in Section 5(b).

“Terminated Transactions” means, with respect to any Early Termination Date, (a) if resulting from an Illegality or a Force Majeure Event, all Affected Transactions specified in the notice given pursuant to Section 6(b)(iv), (b) if resulting from any other Termination Event, all Affected Transactions and (c) if resulting from an Event of Default, all Transactions in effect either immediately before the effectiveness of the notice designating that Early Termination Date or, if Automatic Early Termination applies, immediately before that Early Termination Date.

“Termination Currency” means (a) if a Termination Currency is specified in the Schedule and that currency is freely available, that currency, and (b) otherwise, euro if this Agreement is expressed to be governed by English law or United States Dollars if this Agreement is expressed to be governed by the laws of the State of New York.

“Termination Currency Equivalent” means, in respect of any amount denominated in the Termination Currency, such Termination Currency amount and, in respect of any amount denominated in a currency other than the Termination Currency (the “Other Currency”), the amount in the Termination Currency determined by the party making the relevant determination as being required to purchase such amount of such Other Currency as at the relevant Early Termination Date, or, if the relevant Close-out Amount is determined as of a later date, that later date, with the Termination Currency at the rate equal to the spot exchange rate of the foreign exchange agent (selected as provided below) for the purchase of such Other Currency with the Termination Currency at or about 11:00 a.m. (in the city in which such foreign exchange agent is located) on such date as would be customary for the determination of such a rate for the purchase of such Other Currency for value on the relevant Early Termination Date or that later date. The foreign exchange agent will, if only one party is obliged to make a determination under Section 6(e), be selected in good faith by that party and otherwise will be agreed by the parties.

“Termination Event” means an Illegality, a Force Majeure Event, a Tax Event, a Tax Event Upon Merger or, if specified to be applicable, a Credit Event Upon Merger or an Additional Termination Event.

“Termination Rate” means a rate per annum equal to the arithmetic mean of the cost (without proof or evidence of any actual cost) to each party (as certified by such party) if it were to fund or of funding such amounts.

“Threshold Amount” means the amount, if any, specified as such in the Schedule.

“Transaction” has the meaning specified in the preamble.

“Unpaid Amounts” owing to any party means, with respect to an Early Termination Date, the aggregate of (a) in respect of all Terminated Transactions, the amounts that became payable (or that would have become payable but for Section 2(a)(iii) or due but for Section 5(d)) to such party under Section 2(a)(i) or 2(d)(i)(4) on or prior to such Early Termination Date and which remain unpaid as at such Early Termination Date, (b) in respect of each Terminated Transaction, for each obligation under Section 2(a)(i) which was (or would have been but for Section 2(a)(iii) or 5(d)) required to be settled by delivery to such party on or prior to such Early Termination Date and which has not been so settled as at such Early Termination Date, an amount equal to the fair market value of that which was (or would have been) required to be delivered and (c) if the Early Termination Date results from an Event of Default, a Credit Event Upon Merger or an Additional Termination Event in respect of which all outstanding Transactions are Affected Transactions, any Early Termination Amount due prior to such Early Termination Date and which remains unpaid as of such Early Termination Date, in each case together with any amount of interest accrued or other

compensation in respect of that obligation or deferred obligation, as the case may be, pursuant to Section 9(h)(ii)(1) or (2), as appropriate. The fair market value of any obligation referred to in clause (b) above will be determined as of the originally scheduled date for delivery, in good faith and using commercially reasonable procedures, by the party obliged to make the determination under Section 6(e) or, if each party is so obliged, it will be the average of the Termination Currency Equivalents of the fair market values so determined by both parties.

“Waiting Period” means:—

(a) in respect of an event or circumstance under Section 5(b)(i), other than in the case of Section 5(b)(i)(2) where the relevant payment, delivery or compliance is actually required on the relevant day (in which case no Waiting Period will apply), a period of three Local Business Days (or days that would have been Local Business Days but for the occurrence of that event or circumstance) following the occurrence of that event or circumstance; and

(b) in respect of an event or circumstance under Section 5(b)(ii), other than in the case of Section 5(b)(ii)(2) where the relevant payment, delivery or compliance is actually required on the relevant day (in which case no Waiting Period will apply), a period of eight Local Business Days (or days that would have been Local Business Days but for the occurrence of that event or circumstance) following the occurrence of that event or circumstance.


IN WITNESS WHEREOF the parties have executed this document on the respective dates specified below with effect from the date specified on the first page of this document.

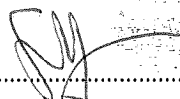
J.P. MORGAN VENTURES ENERGY CORPORATION

CITY OF LONG BEACH, CALIFORNIA

.....
(Name of Party)


.....
(Name of Party)

By: 
Name: John Johnson
Title: VICE PRESIDENT
Date: 3/28/12

By:  **Assistant City Manager**
Name: Patrick H. West
Title: City Manager
Date: 4/11/12

EXECUTED PURSUANT TO SECTION 301 OF THE CITY CHARTER.

APPROVED AS TO FORM

4.5, 20 12
ROBERT F. STANNON, City Attorney
By: 
RICHARD ANTHONY
DEPUTY CITY ATTORNEY

**SCHEDULE
to the
2002 MASTER AGREEMENT**

dated as of March 28, 2012

between

J.P. MORGAN VENTURES ENERGY CORPORATION, a corporation organized and existing under the laws of the State of Delaware
(“Party A”)

and

CITY OF LONG BEACH, CALIFORNIA, a municipality organized under the laws of the State of California
(“Party B”)

PART 1
Termination Provisions

(a) **“Specified Entity”** means in relation to Party A for the purpose of:

Section 5(a)(v), All Affiliates;
Section 5(a)(vi), none;
Section 5(a)(vii), none; and
Section 5(b)(v), none;

and in relation to Party B for the purpose of:

Section 5(a)(v), none;
Section 5(a)(vi), none
Section 5(a)(vii), none; and
Section 5(b)(v), none.

(b) **“Specified Transaction”** will have the meaning specified in Section 14 of this Agreement.

(c) The **“Cross-Default”** provisions of Section 5(a)(vi) will apply to Party A and Party B, and for such purpose:

(1) **“Specified Indebtedness”** will have the meaning specified in Section 14 of this Agreement, except that such term shall not include obligations in respect of deposits received in the ordinary course of a party's banking business; and

(2) **“Threshold Amount”** means, with respect to Party A, an amount equal to three percent (3%) of the shareholders' equity of JPMorgan Chase & Co.; and with respect to Party B, USD 15,000,000.

For purposes of this definition, any Specified Indebtedness denominated in a currency other than the currency in which the Threshold is expressed shall be converted into the currency in which the Threshold is expressed at the exchange rate therefor reasonably chosen by the other party.

For purposes of the above, shareholders' equity shall be determined by reference to the audited consolidated balance sheet for the relevant party's most recently completed fiscal year. Such balance sheet shall be prepared in accordance with relevant generally accepted accounting principles.

(d) The "**Credit Event Upon Merger**" provisions of Section 5(b)(v) will apply to Party A and Party B; provided, however, that if the applicable party or its Credit Support Provider or any applicable Specified Entity of such party has long term, unsecured and unsubordinated indebtedness which is publicly rated (such rating, a "Credit Rating") by Moody's Investor Service, Inc. ("Moody's"), Standard and Poor's Ratings Group (a division of The McGraw Hill Companies, Inc.) ("S&P") or any other internationally recognized rating agency (a "Rating Agency"), then the words "materially weaker" in line 6 of Section 5(b)(v) shall mean that (i) the Credit Rating of such party (or, if applicable, the Credit Support Provider of such party or any applicable Specified Entity of such party) shall be rated lower than Baa3 by Moody's, or lower than BBB- by S&P, (ii) in the event that there is no Credit Rating by either Moody's or S&P applicable to such party (or, if applicable, the Credit Support Provider of such party or any applicable Specified Entity of such party) but such party (or, if applicable, the Credit Support Provider of such party or any applicable Specified Entity of such party) has a Credit Rating from a Rating Agency, lower than a rating equivalent to the foregoing by such Rating Agency, or (iii) there is no Credit Rating by S&P, Moody's or a Rating Agency applicable to such party (or, if applicable, the Credit Support Provider of such party or any applicable Specified Entity of such party).

(e) The "**Automatic Early Termination**" provision of Section 6(a) will not apply to Party A or Party B.

(f) "**Termination Currency**" means United States Dollars.

(g) "**Additional Event of Default**." There shall be added to Section 5(a) of the Agreement the following Event of Default:

"(ix) Authority; Repudiation. Party B shall cease to have authority to make payments under this Agreement or any Transaction subject to this Agreement, or any government entity having jurisdiction over Party B shall introduce any legislation which would have the effect of repudiating this Agreement or any Transaction subject to this Agreement."

(h) **Definition of Certain Events of Default**. Section 5 of the Agreement is hereby amended as follows:

(a) **Bankruptcy**. Section 5(a)(vii)(6) of the Agreement is amended to read in its entirety as follows:

"(6) seeks or becomes subject to the appointment of an administrator, receiver, trustee, custodian or other similar official for it or for all or substantially all of its assets (regardless of how brief such appointment may be, or whether any obligations are promptly assumed by another entity or whether any other event described in this clause (6) has occurred and is continuing) or, in the case of Party B, there shall be appointed or designated in respect of Party B pursuant to any applicable law, an organization, board, authority, agency, body or entity to monitor, review, oversee, make recommendations to, or declare financial emergencies with respect to, financially distressed local government entities or, there shall be declared or introduced or proposed for or by any legislative or regulatory body with competent jurisdiction over, pursuant to any applicable law, the existence of a state of financial emergency or similar position of financial distress in respect of Party B."

(b) Merger Without Assumption. Section 5(a)(viii) of the Agreement is hereby amended to read in its entirety as follows:

“(viii) Merger Without Assumption. The party or any Credit Support Provider of such party consolidates or amalgamates with, or merges with or into, or transfers all or substantially all its assets to, another entity (or, without limiting the foregoing, if such party is a Government Entity, an entity such as an organization, board, commission, authority, agency or body succeeds to the principal functions of, or powers and duties granted to, such party or any Credit Support Provider of such party) and, at the time of such consolidation, amalgamation, merger, transfer or succession:

(1) the resulting, surviving, transferee or successor entity fails to assume all the obligations of such party or such Credit Support Provider under this Agreement or any Credit Support Document to which it or its predecessor was a party by operation of law or pursuant to an agreement reasonably satisfactory to the other party to this Agreement; or

(2) the benefits of any Credit Support Document fail to extend (without the consent of the other party) to the performance by such resulting, surviving, transferee or successor entity of its obligations under this Agreement.”

PART 2 **Tax Representations**

(a) Payer Tax Representations. For the purpose of Section 3(e) of this Agreement, Party A and Party B each hereby make the following representation:

It is not required by any applicable law, as modified by the practice of any relevant governmental revenue authority, of any Relevant Jurisdiction to make any deduction or withholding for or on account of any Tax from any payment (other than interest under Section 9(h) of this Agreement or amounts payable hereunder that may be considered to be interest for United States federal income tax purposes) to be made by it to the other party under this Agreement. In making this representation, it may rely on (i) the accuracy of any representations made by the other party pursuant to Section 3(f) of this Agreement, (ii) the satisfaction of the agreement of the other party contained in Section 4(a)(i) or 4(a)(iii) of this Agreement and the accuracy and effectiveness of any document provided by the other party pursuant to Section 4(a)(i) or 4(a)(iii) of this Agreement and (iii) the satisfaction of the agreement of the other party contained in Section 4(d) of this Agreement, except that it will not be a breach of this representation where reliance is placed on clause (ii) above and the other party does not deliver a form or document under Section 4(a)(iii) by reason of material prejudice to its legal or commercial position.

(b) Payee Tax Representations. For the purpose of Section 3(f) of this Agreement:

- (i) Party A represents that it is a U.S. Person for U.S. federal income tax purposes and its U.S. Tax identification number is 13-3804817.
- (ii) Party B represents that it is a U.S. Person for U.S. federal income tax purposes and its U.S. Tax identification number is 95-6000733.

PART 3
Agreement to Deliver Documents

For the purpose of Sections 4(a)(i) and 4(a)(ii) of this Agreement, each party agrees to deliver the following documents:

- (a) Tax forms, documents or certificates to be delivered are:

For the purpose of Sections 4(a)(i) and (ii) of this Agreement, (i) Party A agrees to deliver two complete and accurate United States Internal Revenue Service Forms W-9 (or any successor applicable forms), in a manner reasonably satisfactory to the other party, (I) upon execution of this Agreement; and (II) promptly upon learning that any such form previously filed by either party has become obsolete or incorrect and (ii) Party B agrees to deliver United States Internal Revenue Service Form W-9 (or any successor applicable forms) in a manner reasonably satisfactory to the other party, (I) upon execution of this Agreement; and (II) promptly upon learning that any such form previously filed by either party has become obsolete or incorrect.

- (b) Other documents to be delivered are:

<u>Party required to deliver document</u>	<u>Form/Document/Certificate</u>	<u>Date by which to be delivered</u>	<u>Covered by Section 3(d) Representation</u>
Party A	Certificate of Incorporation	Upon execution and delivery of this Agreement	Yes
Each party or its Credit Support Provider, as applicable	Audited annual financial statements of such entity (in the case of Party A, of JPMorgan Chase & Co.) for each fiscal year certified by independent certified public accountants and prepared in accordance with relevant generally accepted accounting principles	Upon request if unavailable on the SEC website or such entity's website and in any event, within 180 days following the fiscal year end.	Yes
Party A or its Credit Support Provider, as applicable	Unaudited financial statements of such entity (in the case of Party A, of JPMorgan Chase & Co.) for each quarter, in each case prepared in accordance with relevant generally accepted accounting principles	Upon request if unavailable on the SEC website or such entity's website and in any event, within 60 days following each quarter end	Yes

Each party and its Credit Support Provider, as applicable	Credit Support Document(s) described in Part 4(e)	Upon execution and delivery of this Agreement	No
Party A and its Credit Support Provider, as applicable	Certified resolutions or equivalent documents evidencing necessary corporate or partnership, as the case may be, authority and approvals with respect to the execution, delivery and performance of this Agreement and each Credit Support Document (as applicable)	Upon execution and delivery of this Agreement	Yes
Party A and its Credit Support Provider, as applicable	Certificate of authority and specimen signatures of individuals executing this Agreement and each Credit Support Document (as applicable)	Upon execution and delivery of this Agreement and thereafter upon request of the other party	Yes
Party B	Certified copies of: (1) the charter, enabling statutes, and constitution or comparable legislation, creating or authorizing Party B; (2) other charter and constituent instruments of Party B; (3) Council Letter and City Council Minutes approving the Agreement, the Credit Support Documents and the Transactions contemplated by this Agreement and authorizing a specified person or persons to execute and deliver on behalf of Party B this Agreement, the exhibits, supplements, and attachments hereto, the documents incorporated by reference herein, and the Confirmations hereunder; and (4) amendments to any of the foregoing	Upon execution and delivery of this Agreement	Yes

Party B	Opinion of counsel satisfactory to Party A	Upon execution and delivery of this Agreement	No
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PART 4
Miscellaneous

(a) **Addresses for Notices.** For the purpose of Section 12(a) of this Agreement:

(1) Address for notice or communications to Party A:

Any notice relating to a particular Transaction shall be delivered as set forth below:

J.P. Morgan Ventures Energy Corporation
Attention: Commodity Operations
Email: NA.Energy.Confirmations@jpmorgan.com

Any notice delivered for purposes of Sections 5 and 6 of this Agreement shall be delivered to each of the following addresses:

J.P. Morgan Ventures Energy Corporation
Attention: Energy Legal Department- Derivatives Practice Group
270 Park Avenue, 40th Floor
New York, New York 10017-2070

A copy of all financial statements and certificates delivered pursuant to Part 3 of this Schedule shall be delivered to the following address:

JPMorgan Chase Bank, National Association
Attention: Municipal Derivatives Credit Group
270 Park Avenue, 22nd Floor
New York, New York 10017-2070

(2) Address for notice or communications to Party B:

City of Long Beach
Attention: Director, Gas and Oil Department
2400 E. Spring Street, Long Beach, CA 90806
Facsimile: 562-570-2008
Telephone: 562-570-2001

(b) **Process Agent.** For the purpose of Section 13(c) of this Agreement:

Party A appoints as its Process Agent: Not applicable.
Party B appoints as its Process Agent: Not applicable.

(c) **Offices.** The provisions of Section 10(a) will apply to this Agreement.

(d) **Multibranch Party.** For the purpose of Section 10 of this Agreement:

Party A is not a Multibranch Party.

Party B is not a Multibranch Party.

(e) **Credit Support Document.**

Credit Support Document means, in relation to Party A, (i) The Guaranty of the Credit Support Provider in favor of Party B attached hereto as Exhibit I and (ii) the ISDA Credit Support Annex and supplementary "Paragraph 13 - Elections & Variables" appended hereto

Credit Support Document means, in relation to Party B, the ISDA Credit Support Annex and supplementary "Paragraph 13 - Elections & Variables" appended hereto

(f) **Credit Support Provider.**

Credit Support Provider means, in relation to Party A, JPMorgan Chase & Co.

Credit Support Provider means, in relation to Party B, not applicable.

(g) **Governing Law.** This Agreement will be governed by and construed in accordance with the laws of the State of New York (without reference to choice of law doctrine, but without prejudice to the provisions of Section 5-1401 of the General Obligations Law of the State of New York).

(h) **Netting of Payments.** "Multiple Transaction Payment Netting" will apply for the purpose of Section 2(c) of this Agreement to all Transactions starting from the date of this Agreement; provided, however, that energy commodity Transactions shall be netted as a group.

(i) **"Affiliate"** will have the meaning specified in Section 14 of this Agreement.

(j) **Absence of Litigation.** For the purpose of Section 3(c) of this Agreement

"Specified Entity" means, in relation to Party A, any Affiliate of Party A.

"Specified Entity" means, in relation to Party B, any Affiliate of Party B.

(k) **No Agency.** The provisions of Section 3(g) of this Agreement will apply to this Agreement.

(l) **Representations.** (1) The introductory clause of Section 3 of this Agreement is hereby amended to read in its entirety as follows:

"Each party represents to the other party (which representations will be deemed to be repeated by each party on each date on which a Transaction is entered into and, in the case of the representations in Section 3(a) at all times until the termination of this Agreement) that:"

(m) **Additional Representations of Party B.** For the purpose of Section 3 of the Agreement, Party B hereby further represents and warrants to Party A (which representations will be deemed to be repeated by Party B at all times until the termination of this Agreement and any Transactions) that:

(h) **No-Speculation.** This Agreement has been, and each Transaction hereunder has been or will be, as the case may be, entered into for the purpose of managing its borrowings or

investments, hedging its underlying assets or liabilities or in connection with its line of business and not for the purpose of speculation.

(i) **No Immunity.** It is not entitled to claim immunity on the grounds of sovereignty or other similar grounds with respect to itself or its revenues or assets (irrespective of their use or intended use) from (i) suit, (ii) jurisdiction of any court, (iii) relief by way of injunction, order for specific performance or for recovery of property, (iv) attachment of its non-essential assets (whether before or after judgment) or (v) execution or enforcement of any judgment to which it or its revenues or assets might otherwise be made subject to in any Proceedings (as defined in Section 13(b)) in the courts of any jurisdiction and no such immunity (whether or not claimed) may be attributed to such party or its revenues or assets.”

(j) **Generally Accepted Accounting Principles.** It represents (which representation will be deemed to be repeated on each date on which a Transaction is entered into) that the financial information delivered by it pursuant to Part 3 of this Schedule, including the related schedules and notes thereto, has been prepared in accordance with accounting principles that are generally accepted in the United States of America for government entities, applied consistently throughout the periods involved (except as disclosed therein).

(k) **No Material Contingent Obligation(s).** It represents (which representation will be deemed to be repeated on each date on which a Transaction is entered into) that neither it nor any of its subsidiaries has any material contingent obligation, contingent liability or liability for taxes, long-term lease or unusual forward or long-term commitment, which is not reflected in the financial statements delivered to the other party pursuant to this Schedule or in the notes thereto.

(n) **Additional Representation** will apply. For the purpose of Section 3 of this Agreement, the following will constitute an Additional Representation:

(h) **Relationship Between Parties.** Each party will be deemed to represent to the other party on the date on which it enters into a Transaction that (absent a written agreement between the parties that expressly imposes affirmative obligations to the contrary for that Transaction):

(i) **Non-Reliance.** It is acting for its own account, and it has made its own independent decisions to enter into that Transaction and as to whether that Transaction is appropriate or proper for it based upon its own judgment and upon advice from such advisers as it has deemed necessary. It is not relying on any communication (written or oral) of the other party as investment advice or as a recommendation to enter into that Transaction, it being understood that information and explanations related to the terms and conditions of a Transaction will not be considered investment advice or a recommendation to enter into that Transaction. No communication (written or oral) received from the other party will be deemed to be an assurance or guarantee as to the expected results of that Transaction.

(ii) **Assessment and Understanding.** It is capable of assessing the merits of and understanding (on its own behalf or through independent professional advice), and understands and accepts, the terms, conditions and risks of that Transaction. It is also capable of assuming, and assumes, the risks of that Transaction.

(iii) **Status of Parties.** The other party is not acting as a fiduciary for or an adviser to it in respect of that Transaction.

(iv) **Other Transactions.** It understands and acknowledges that the other party may, either in connection with entering into a Transaction or from time to time thereafter, engage in open market transactions that are designed to hedge or reduce the risks incurred by it in connection with such Transaction and that the effect of such open market transactions may be to affect or reduce the value of such Transaction.

(o) **Eligible Contract Participant/Eligible Commercial Entity.** Each party represents to the other party (which representation will be deemed to be repeated by each party on each date on which a Transaction is entered into) that it is an "eligible commercial entity" and "eligible contract participant" as defined in Sections 1a(11) and (12) respectively of the Commodity Exchange Act, as amended (7 U.S.C. § 1a (11),(12)), as amended (the "CEA"); and with respect to Transactions entered into under Section 2(g) of the CEA, the material terms of such Transaction have been individually negotiated and tailored by it.

(p) **Recording of Conversations.** Each party (i) consents to the recording of telephone conversations between the trading, marketing and other relevant personnel of the parties and their Affiliates in connection with this Agreement or any potential Transaction, (ii) agrees to obtain any necessary consent of, and give any necessary notice of such recording to, its relevant personnel and (iii) agrees, to the extent permitted by applicable law, that recordings may be submitted in evidence in any Proceedings (as defined in Section 13(b)).

PART 5

Other Provisions

(a) **Waiver of Jury Trial.** EACH PARTY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY RIGHT IT MAY HAVE TO A TRIAL BY JURY IN RESPECT OF ANY SUIT, ACTION OR PROCEEDING RELATING TO THIS AGREEMENT OR ANY CREDIT SUPPORT DOCUMENT. EACH PARTY (I) CERTIFIES THAT NO REPRESENTATIVE, AGENT OR ATTORNEY OF THE OTHER PARTY OR ANY CREDIT SUPPORT PROVIDER HAS REPRESENTED, EXPRESSLY OR OTHERWISE, THAT SUCH OTHER PARTY WOULD NOT, IN THE EVENT OF SUCH A SUIT, ACTION OR PROCEEDING, SEEK TO ENFORCE THE FOREGOING WAIVER AND (II) ACKNOWLEDGES THAT IT AND THE OTHER PARTY HAVE BEEN INDUCED TO ENTER INTO THIS AGREEMENT AND PROVIDE FOR ANY CREDIT SUPPORT DOCUMENT, AS APPLICABLE, BY, AMONG OTHER THINGS, THE MUTUAL WAIVERS AND CERTIFICATIONS IN THIS PROVISION.

(b) **Judicial Reference.** IN THE EVENT ANY LEGAL PROCEEDING IS FILED IN A COURT OF THE STATE OF CALIFORNIA (THE "COURT") BY OR AGAINST ANY PARTY HERETO IN CONNECTION WITH ANY CONTROVERSY, DISPUTE OR CLAIM DIRECTLY OR INDIRECTLY ARISING OUT OF OR RELATING TO THIS AGREEMENT OR THE TRANSACTIONS CONTEMPLATED HEREBY (WHETHER BASED ON CONTRACT, TORT OR ANY OTHER THEORY) (EACH, A "CLAIM") AND THE WAIVER SET FORTH IN THE PRECEDING PARAGRAPH IS NOT ENFORCEABLE IN SUCH ACTION OR PROCEEDING, THE PARTIES HERETO AGREE AS FOLLOWS:

If and to the extent that the foregoing waiver of the right to a jury trial is unenforceable for any reason in such forum, the parties hereby consent to the adjudication of any and all claims pursuant to judicial reference as provided in California Code of Civil Procedure Section 638, and the judicial referee shall be empowered to hear and determine any and all issues in such reference whether fact or law. The parties represent that each has reviewed this waiver and consent and each knowingly and voluntarily waives its jury trial rights and consents to judicial reference following the opportunity to consult with legal counsel

of its choice on such matters. In the event of litigation, a copy of this agreement may be filed as a written consent to a trial by the court or to judicial reference under California Code of Civil Procedure Section 638 as provided herein.

(c) **ISDA Definitions.** Reference is hereby made to the 2006 ISDA Definitions (the "2006 Definitions") and the 1998 FX and Currency Option Definitions (the "FX Definitions") (collectively the "ISDA Definitions") each as published by the International Swaps and Derivatives Association, Inc., which are hereby incorporated by reference herein. Any terms used and not otherwise defined herein which are contained in the ISDA Definitions shall have the meaning set forth therein.

(d) **Inconsistency.** In the event of any inconsistency between any of the following documents, the relevant document first listed below shall govern: (i) a Confirmation; (ii) the Schedule and Paragraph 13 of an ISDA Credit Support Annex (as applicable); (iii) Commodity Definitions, (iv) the ISDA Definitions; and (v) the printed form of ISDA Master Agreement and ISDA Credit Support Annex (as applicable). In the event of any inconsistency between provisions contained in the 2006 Definitions and the Commodity Definitions (as defined below), the Commodity Definitions shall prevail.

(e) **Accounts.** If a Confirmation does not state the account to which United States Dollars payments are to be made, they shall be made as follows, unless otherwise notified:

Party A:

Pay:

Bank: JPMorgan Chase Bank

For the Account of: J.P. Morgan Ventures Energy Corporation

ABA Routing No.: [REDACTED]

Account #: [REDACTED]

Party B:

Pay:

Bank: Union Bank of California, Los Angeles, CA

For the Account of: City of Long Beach

Cash Concentration Account

ABA Routing No.: [REDACTED]

Account #: [REDACTED]

(f) **Confidentiality.** Any information made available by one party or its Credit Support Provider to the other party or its Credit Support Provider with respect to this Agreement is confidential and shall not be disclosed to any third party, except for such information (i) as may become generally available to the public other than due to breach of this provision, (ii) as may be required or appropriate in response to any summons, subpoena, or otherwise in connection with any litigation or to comply with any applicable law, order, regulation, ruling, or accounting disclosure rule or standard (including without limitation the California Public Records Act), (iii) as may be obtained from a non-confidential source that disclosed such information in a manner that did not violate its obligations to the non-disclosing party or its Credit Support Provider in making such disclosure, (iv) as is disclosed to regulators or examiners or (v) as may be furnished to the disclosing party's Affiliates, and to each of such person's auditors, attorneys, advisors or lenders which are required to keep the information that is disclosed in confidence and provided, further, that a party may disclose any one or more of the commercial terms of a Transaction (other than the name of the other party unless otherwise agreed to in writing by the parties) to any industry price source for the purpose of aggregating and reporting such information in the form of a published energy price index. With respect to information provided with respect to a Transaction, this obligation shall survive for a period of one (1) year following the expiration or termination of such Transaction. With respect to information made available pursuant to this Agreement, this obligation shall survive for a

period of one (1) year following the delivery of such information. With respect to information provided with respect to a Transaction or this Agreement, this obligation shall survive for a period of one (1) year following the expiration or termination of such Transaction or Agreement, as applicable.

(g) **Setoff.** Section 6(f) of this Agreement is amended by (i) replacing the words “Payee to the Payer” in the sixth and seventh lines with the words “other party to X or any Affiliate of X”.

(h) **2002 Master Agreement Protocol.** The parties agree that with effect from the date of this Agreement the terms of each Annex to the 2002 Master Agreement Protocol published by the International Swaps and Derivatives Association Inc., (the “Protocol”) shall apply to this Agreement as if the parties had adhered to the Protocol without amendment.

(i) **Obligations: General Conditions.** Section 2(a)(iii) is hereby amended by: (i) deleting in the second line thereof the word “or” and replacing it with a comma; and (ii) inserting in the second line thereof after the words “Potential Event of Default” the words “; or Incipient Illegality”.

(j) **Powers.** Section 3(a)(ii) is hereby amended by (i) inserting in the first line thereof after the word “power” the words “(in the case of Party B, pursuant to the Authorizing Law)”; (ii) deleting in the fifth line thereof after the word “party” the word “and” and replacing it with “; it”; (iii) inserting in the fifth line thereof after the word “action” the words “and has made all necessary determinations and findings”; and (iv) adding in the fifth line thereof after the word “performance” and before the semicolon the words “; the individual(s) executing and delivering this Agreement and any other documentation (including any Credit Support Document) relating to this Agreement to which it is a party or that it is required to deliver is duly empowered and authorized to do so, and it has duly executed and delivered this Agreement and any Credit Support Document to which it is a party”.

(k) **Absence of Certain Events.** Section 3(b) is hereby amended by inserting in the first line thereof after the word “knowledge,” the words “Incipient Illegality (in the case of Party B) or”.

(l) **Additional Agreements.** (1) The introductory clause of Section 4 of this Agreement is hereby amended to read in its entirety as follows:

“4. **Agreements.** Each party agrees with the other (and, in the case of Section 4(f), Party B agrees with Party A) that, so long as either party has or may have any obligation under this Agreement or under any Credit Support Document to which it is a party:”

(ii) Section 4 of this Agreement is hereby amended by adding the following Section (f) thereto:

“(f) **Notice of Incipient Illegality.** If an Incipient Illegality occurs, Party B will, promptly upon becoming aware of it, notify Party A, specifying the nature of that Incipient Illegality and will also give such other information about that Incipient Illegality as the other party may reasonably require.”

(m) **Security and Source of Payment of Party B’s Obligations.** Party B represents, covenants and warrants at all time throughout the term of the Agreement that the obligations of Party B hereunder shall be special obligations payable solely from, and secured as to payment solely by, the Gas Enterprise Revenues and funds on deposit in the Gas Revenue Fund, and as a charge against such Gas Enterprise Revenues, as an operating expense of the Gas Enterprise and provided, however, that Party B, in its discretion, may apply any legally available monies to the payment of amounts due under this Agreement. The Gas Enterprise Revenues and funds on deposit in the Gas Revenue Fund (collectively, the “Collateral”) are hereby pledged and assigned for the payment of obligations of Party B hereunder. The

Collateral hereby pledged and assigned shall immediately be subject to the lien of this pledge without any further physical delivery thereof or other further act, and the lien of this pledge shall be a first lien (on parity with any other existing pledges) and shall be valid and binding as against all parties having claims of any kind in tort, contract or otherwise against Party B, irrespective of whether such parties have notice thereof.

The obligations of Party B hereunder are not payable from or secured by a pledge or lien on any property of Party B except the Collateral pledged therefor pursuant to this Agreement. Neither the faith or credit nor the taxing power of the State of California, Party B or any other public agency is pledged to the payment of the obligations of Party B.

For purposes of this Agreement, the term "Gas Revenue Fund" means the fund by that name held by Party B into which Gas Enterprise Revenues are deposited, and the term "Gas Enterprise Revenues" means all those certain revenues earned by Party B from the operations or assets of the Gas Enterprise, including without limitation, fees and charges to the general public (including home, retail, commercial and industrial users), payments by or from public utilities under contract with the Gas Enterprise and all other moneys paid to or received by the Gas Enterprise from any source whatsoever, unless otherwise limited by law or by the terms of a grant or similar document, and the term "Gas Enterprise" means the gas utility of Party B, including all of its revenue-producing functions, facilities and properties, whether or not directly related to the provision of natural gas and services.

(n) **Rate Covenant.** Party B shall, at all times during the term of this Agreement and until all obligations of Party B under this Agreement have been paid in full, establish, fix, prescribe, maintain and collect rates, fees, rentals and charges in connection with the Gas Enterprise, and for services rendered in connection therewith so as to provide Gas Enterprise Revenues sufficient to enable Party B to pay Party A all amounts payable under this Agreement, to pay all other amounts payable from the Gas Enterprise Revenues and to maintain any required reserves.

(o) **Waiver of Immunities.** To the fullest extent permitted by law, Party B shall waive, and does hereby waive, any and all rights to claim immunity on the grounds of sovereignty or other similar grounds from (i) suit, (ii) jurisdiction of any court, (iii) relief by way of mandamus to perform its obligations under this Agreement, or (iv) enforcement by writ of mandamus of any judgment to which it might otherwise be made subject in any suit, actions or proceedings in the courts of any jurisdiction.

(p) **Termination of Agreement.** Each of the parties hereto may terminate the Agreement at any time by at least thirty days' prior written notice to the other party, provided that such termination will not affect any outstanding Transaction and the provisions of this Agreement will continue to apply until all the obligations of the parties under this Agreement have been performed fully.

(q) **Additional Definitions.** Section 14 of the Agreement is hereby amended by adding the following definitions:

- (i) **"Authorizing Law"** means the California Constitution and Government Code, , the Long Beach Municipal Code and the City of Long Beach Charter, each as amended or supplemented.
- (ii) **"Credit Rating"** with respect to any entity, on any date of determination, (y) with respect to Party A, the respective ratings then assigned to Party A's unsecured, senior long-term debt by S&P, Moody's or other specified rating agency or agencies or if Party A does not have a rating for its unsecured, senior long-term debt, then the rating assigned to such entity as its "corporate credit rating" by S&P and (z) with respect to Party B, any

public, underlying (i.e., unenhanced) rating of Party B's outstanding Bonds, but excluding and not taking into account any corporate equivalent rating, global scale rating or any similar credit rating.

- (iii) **"Incipient Illegality"** means (a) the enactment by any legislative body with competent jurisdiction over Party B of legislation which, if adopted as law, would render unlawful (i) the performance by Party B of any absolute or contingent obligation to make a payment or delivery or to receive a payment or delivery in respect of a Transaction, or the compliance by Party B with any other material provisions of this Agreement relating to such Transaction, or (ii) the performance by Party B or a Credit Support Provider of Party B of any contingent or other obligation which Party B (or such Credit Support Provider) has under any Credit Support Document relating to such Transaction; (b) any assertion in any proceeding, forum or action by a government entity, in respect of Party B, or in respect of any entity organized under the laws of the state in which Party B is located to the effect that performance under this Agreement or similar agreements is unlawful; or (c) the occurrence with respect to Party B or any Credit Support Provider of Party B of any event that constitutes an Illegality.
- (iv) **"Moody's"** means Moody's Investors Service, Inc. or its successor.
- (v) **"S&P"** means the Standard & Poor's Rating Group or its successor.

PART 6

Provisions Relating to Energy Commodity Transactions

- (a) **2005 ISDA Commodity Definitions.** The 2005 ISDA Commodity Definitions (as published by the International Swap and Derivatives Association, Inc.) as amended, supplemented, replaced or modified from time to time (the "Commodity Definitions"), are incorporated by reference in this Agreement and the relevant Confirmations with respect to "Transactions," as defined by the Commodity Definitions, except as otherwise specifically provided in the relevant Confirmation.
- (b) **Procedures for Entering into Transactions.** The parties hereby amend Section 9(e)(ii) of the Agreement with respect to all commodity Transactions where an energy commodity is the relevant Commodity by adding the following sentences at the end thereof: "On or promptly following the Trade Date of a Transaction conducted over the telephone, Party A will send to Party B a Confirmation. Party B will promptly thereafter in writing confirm the accuracy of, or request the correction of, such Confirmation. If any dispute shall arise as to whether an error exists in a Confirmation, the parties shall in good faith make reasonable efforts to resolve the dispute. If Party B fails to accept or dispute the Confirmation in the manner set forth above within three (3) Local Business Days after it was effectively sent to Party B, the Confirmation shall be deemed to correctly reflect the parties' agreement on the terms of the Transaction referred to therein, absent manifest error. The requirement of this Section and elsewhere in this Agreement that the parties exchange Confirmations shall for all purposes be deemed satisfied by a Confirmation sent and an acknowledgment deemed given as provided herein."
- (c) **Calculation Agent.** The Calculation Agent is Party A, unless otherwise specified in a Confirmation in relation to the relevant Transaction.

Part 7
Physically Settled Gas Transactions

(a) **ISDA North American Gas Annex.** The North American Gas Annex to the ISDA Master Agreement published by ISDA in 2005 as Sub-Annex E as part of the ISDA the Commodity Definitions (the "Gas Annex") is incorporated by reference in this Agreement and in the relevant Confirmations with respect to "Transactions," as defined by the Commodity Definitions, in physical gas, except as otherwise specifically provided in the relevant Confirmation. All terms used in this Part 7 that are not otherwise defined shall have the meanings given to them in the Gas Annex.

(b) **Modifications to the ISDA Gas Annex.** The following modifications to the ISDA Gas Annex are applicable:

(i) **References to Part 6.** The Gas Annex is amended by replacing all references to "Part 6" or "Part 6 of the Schedule" with references to the "Gas Annex" or "Gas Annex to the Schedule", as applicable.

(ii) **Other Documentation.** The following provision is added:

"Upon request, each Party shall deliver to the other Party documentation reasonably requested to evidence the authority and power of such Party and/or its Guarantor, as the case may be, to enter into this Agreement or any guaranty, as the case may be, which may include, without limitation, certified resolutions and a certification of the signature and authority of the individual(s) executing this Agreement or such guaranty, as the case may be and to the extent applicable and requested certificates, documents or other evidence sufficient to confirm the sales tax exempt status of such Party for each jurisdiction in which the purchase, sale and/or delivery of any physical commodity takes place under this Agreement, such that the other party will bear no obligation in relation to such purchase, sale and/or delivery for charging, collecting or remitting sales, use or other excise taxes to any local, municipal, state or federal taxing authority or agency."

(c) **Elective Provisions.** Clause (1) of the Gas Annex is amended and restated in its entirety to read as follows:

"(1) Elective Provisions.

1. (a)(ii) Outstanding Gas Transactions. This Gas Annex shall apply to the following pre-existing Gas Transactions pursuant to clause (a)(ii):

Option A: All Gas Transactions outstanding between the parties as of the date this Gas Annex becomes effective.

Option B: The Gas Transactions listed in Schedule 1 to this Gas Annex.

Option C: None of the Gas Transactions between the parties that were executed prior to the date this Gas Annex becomes effective.

If none of the above options is selected, Option A shall apply.

2. (a)(iii) Outstanding Gas Credit Support:

Outstanding Gas Credit Support held by a party in connection with Outstanding Gas Transactions shall be deemed to have been delivered under and in connection with this Agreement pursuant to clause (a)(iii). If not checked, not applicable.

3. (b)(ii) Performance Obligation (remedy for breach of Firm obligation):

Option A: Cover Standard
 Option B: Spot Price Standard
If neither option is selected, Option A shall apply.

4. (e) Taxes:

Option A: Buyer Pays At and After Delivery Point
 Option B: Seller Pays Before and At Deliver Point
If neither option is selected, Option A shall apply.

5. (f)(ii) Payment Date:

Option A: the later of the 25th Day of Month following Month of delivery or 10 Days after receipt of the invoice by Buyer (provided that if the Payment Date is not a Local Business Day, payment is due on the next Local Business Day following that date).

Option B: the later of the ___ Day of Month following Month of delivery or 10 Days after receipt of the invoice by Buyer (provided that if the Payment Date is not a Local Business Day, payment is due on the next Local Business Day following that date).

Option C: Notwithstanding anything to the contrary in this Schedule, payments with respect to both Gas Transactions and Power Transactions (as defined separately in this Schedule) will be netted and payable on or before the later of the 20th Day of Month following Month of delivery or 10 Days after receipt of the invoice by Buyer (provided that if the Payment Date is not a Local Business Day, payment is due on the next Local Business Day following that date).

Option D: Notwithstanding anything to the contrary in this Schedule, payments with respect to both Gas Transactions and Power Transactions (as defined separately in this Schedule) will be netted and payable on or before the later of the 25th Day of Month following Month of delivery or 10 Days after receipt of the invoice by Buyer (provided that if the Payment Date is not a Local Business Day, payment is due on the next Local Business Day following that date).

If none of the above options is selected, Option A shall apply.

6. (k)(xxii) Alternative to Spot Price Index:

The parties have selected the following alternative index as the Spot Price Index: _____ . If no index is specified, the Spot Price Index specified in clause (l)(xxi) applies."

(d) **Notifications for Gas Transactions.**

J.P. MORGAN VENTURES ENERGY CORPORATION

Invoices:

As set forth in Part 4 of the Schedule unless otherwise set forth below:

Attn: Physical Settlements
Phone: (713) 236-5200
Facsimile: (713)-236-3399
Email:
na.energy.settlements.physical@jpmorgan.com

Nominations:

As set forth in Part 4 of the Schedule unless otherwise set forth below:

Attn: Gas Scheduling
Phone: (713) 236-5027
Facsimile: (713) 236-4100

Confirmations:

As set forth in Part 4 of the Schedule unless otherwise set forth below:

Attn: Energy Confirmations
Phone: (212) 623-8225
Facsimile: (212) 383-6600
Email: NA.Energy.Confirmations@jpmorgan.com

Option Exercise:

As set forth in Part 4 of the Schedule unless otherwise set forth below:

Attn:
Phone:
Facsimile:

CITY OF LONG BEACH

Invoices:

As set forth in Part 4 of the Schedule unless otherwise set forth below:

Attn: Gas Supply Officer
Phone: 562-570-3981
Facsimile: 562-570-2008

Nominations:

As set forth in Part 4 of the Schedule unless otherwise set forth below:

Attn: Gas Supply Officer
Phone: 562-570-3981
Facsimile: 562-570-2008

Confirmations:

As set forth in Part 4 of the Schedule unless otherwise set forth below:

Attn: Gas Supply Officer
Phone: 562-570-3981
Facsimile: 562-570-2008

Option Exercise:

As set forth in Part 4 of the Schedule unless otherwise set forth below:

Attn:
Phone:
Facsimile:

Wire Transfer - or - ACH (check one box):

Wire Transfer - or - ACH (check one box):

As set forth in Part 4 of the Schedule unless otherwise set forth below:

As set forth in Part 4 of the Schedule unless otherwise set forth below:


Bank: JPMorgan Chase Bank
ABA: [REDACTED]
Account: [REDACTED]
Other Details:


Bank: Union Bank of California
ABA: [REDACTED]
Account: [REDACTED]
Other Details: Cash Concentration Account


Please confirm your agreement to the terms of the foregoing Schedule by signing below.

J.P. MORGAN VENTURES ENERGY CORPORATION
(Party A)

CITY OF LONG BEACH, CALIFORNIA
(Party B)

By: 
Name: John Johnson
Title: VICE PRESIDENT
Date: 3/28/12

By: 
Name: Patrick H. West **Assistant City Manager**
Title: City Manager **EXECUTED PURSUANT TO SECTION 301 OF THE CITY CHARTER.**
Date: 4-11-12

APPROVED AS TO FORM
^{RFA}
4-5, 20 12
ROBERT E. SHANNON, City Attorney
By: 
RICHARD ANTHONY
DEPUTY CITY ATTORNEY



GUARANTEE

This GUARANTEE, dated effective as of [date] (*this "Guarantee"*), made by JPMORGAN CHASE & CO., a Delaware corporation and multi-bank financial holding company headquartered in New York, New York (*"Guarantor"*),

WITNESSETH:

WHEREAS, Guarantor's wholly owned subsidiary J.P. Morgan Ventures Energy Corporation (*"Obligor"*), has entered into an ISDA Master Agreement dated March __, 2012 (*the "Transactions"*) which Transactions have been memorialized in an agreement duly executed by Obligor (the *"Transaction Documents"*), with City of Long Beach, California (the *"Beneficiary"*); and

WHEREAS, the Guarantor derives substantial direct and indirect benefits from the entry by Obligor into Transactions with Beneficiary; and

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Guarantor hereby agrees as follows:

- (1) **Guarantee.** Guarantor, subject to the terms hereof, absolutely and unconditionally guarantees to Beneficiary up to an aggregate amount not exceeding [cap amount] the timely and complete payment as and when due, whether by acceleration or otherwise, of all obligations and liabilities, whether now in existence or hereafter arising, of Obligor to Beneficiary under and strictly in accordance with the Transactions and the Transaction Documents (*such obligations and liabilities, the "Obligations"*). If Obligor fails to pay any Obligation as and when due, Guarantor shall, promptly upon receiving written notice of such failure from Beneficiary or its agent, pay such Obligation to Beneficiary strictly in accordance with all terms and provisions of the Transactions and all applicable Transaction Documents (including, without limitation, place of payment), as if such payment were made by Obligor provided, however, that the Guarantor shall not have any liability to make any payment, respecting any Obligation if the Obligor is unable to make payment of the Obligation due to (i) an act of war, insurrection or civil strife; or (ii) an action by the government, or any instrumentality thereof, (whether de jure or de facto) in the country in which the Obligor is located or the Obligation is to be performed.
- (2) **Guarantee of Payment, not Collection.** This Guarantee is a guarantee of payment and not of collection. Beneficiary shall not be required to exhaust any right or remedy or to take any action against Obligor or any other person or entity or any collateral as a condition to payment by Guarantor hereunder.
- (3) **Guarantee Irrevocable; Scope.** This Guarantee is a continuing guarantee of all Obligations now or hereafter existing, and shall remain in full force and effect until it terminates in

accordance with Section 8 hereof. Notwithstanding anything to the contrary contained herein, this Guarantee shall not apply if, and to the extent that, Guarantor and Beneficiary have so agreed in writing.

(4) Nature of Guarantee. Guarantor's liability hereunder is irrespective of:

- (a)* any change in the amount, time, manner or place of payment of, or in any other term of, any Obligation, or any other amendment or waiver of or any consent to departure from any terms of any Obligation;
- (b)* any release or amendment or waiver of, or consent to departure from, any other guarantee or support document, or any exchange, release or non-perfection of any collateral, for any Obligation;
- (c)* the absence of any action to enforce any Obligation or any collateral therefor;
- (d)* the rendering of any judgment against Obligor or any action to enforce the same;
- (e)* any bankruptcy or insolvency of Obligor or any proceeding relating thereto; and
- (f)* any lack or limitation of status or of corporate power of Obligor, or any incapacity or disability of any signatory for Obligor, or of any other guarantor or obligor in respect of any Obligation, or any change whatsoever in the objects, capital structure, or business of Obligor;

provided, however, that except as expressly set forth herein, (i) under no circumstances will Guarantor be liable at any time or place to Beneficiary for any amount of any payment that Obligor is excused from making under the terms of the Transaction Documents, for so long as Obligor shall be excused under such terms or for any amount in excess of the amount actually due and owing by Obligor to Beneficiary at such time and place and (ii) any and all defenses available to a guarantor under applicable law are reserved by Guarantor and any defenses, set-offs and counterclaims of Obligor shall be available to Guarantor to the same extent as such defenses, set-offs or counterclaims are available to Obligor and may be asserted by Guarantor in respect of its obligations hereunder, in each case whether or not asserted by Obligor.

- (5) Formalities.** Guarantor hereby waives diligence, presentment, demand of payment (except as provided in paragraph (1)), any right to require a proceeding against Obligor, protest or notice with respect to the Obligations and all demands whatsoever, and covenants that this Guarantee shall not be discharged except in accordance with Section 8 hereof. The grant of time or other indulgence to Obligor shall in no manner release Guarantor from any of its obligations hereunder.
- (6) Reinstatement.** This Guarantee shall continue to be effective or be reinstated, as the case may be, if at any time any payment of any Obligation is rescinded or must otherwise be returned by Beneficiary upon the insolvency, bankruptcy or reorganization of Obligor or otherwise, all as though the payment had not been made.
- (7) Subrogation.** Guarantor shall be subrogated to all rights of Beneficiary against Obligor in respect of any amounts paid by Guarantor hereunder; *provided* that Guarantor shall not be entitled to enforce or to receive any payments arising out of, or based upon, such right of subrogation until the Obligations to Beneficiary shall have been finally and irrevocably paid in full.

- (8) **Expiration.** Unless earlier renewed in writing by Guarantor, all obligations of the Guarantor under his Guarantee shall terminate at 3:00 pm New York Time on the fifth anniversary of the date hereof. Furthermore, Guarantor may terminate this Guarantee with respect to such Beneficiary at any time upon twenty (20) calendar days' prior written notice to such individual Beneficiary, which notice shall be provided to Beneficiary in accordance with the applicable Transaction Documents. (*the "Termination Date"*), it being expressly agreed that (a) such termination shall not limit or terminate this Guarantee in respect of any Payment Demands by Beneficiary under this Guarantee that are properly delivered to the Guarantor on or before such Termination Date; or (b) prevent reinstatement of this Guarantee with respect to any such Obligations in accordance with Section 6 hereof.
- (9) **Representations/Warranties.** Guarantor represents and warrants to Beneficiary that, as of the date hereof:
- (a) It is a corporation duly organized, validly existing and in good standing under the law of the State of Delaware;
 - (b) It has the full power and authority to execute and deliver this Guarantee and to perform its obligations hereunder; it has taken all necessary action to authorize such execution, delivery and performance; this Guarantee has been duly executed and delivered by Guarantor; and the execution, delivery and performance of this Guarantee by the Guarantor does not contravene or constitute a default under any statute, regulation or rule of any applicable governmental authority or under any provision of the Guarantor's certificate of incorporation or by-laws or any contractual restriction binding on the Guarantor;
 - (c) This Guarantee constitutes a legal, valid and binding obligation of Guarantor, enforceable against Guarantor in accordance with its terms, except as such enforceability may be limited by bankruptcy, insolvency, receivership or other similar laws affecting the rights of creditors generally, or by general principles of equity; and
 - (d) No authorization, approval or consent of, and no filing or registration with, any governmental authority is necessary for the execution, delivery or performance by Guarantor of this Guarantee or for the validity or enforceability hereof.
- (10) **Notices.** Any notice or communication required or permitted to be made under this Guarantee shall be made in the same manner and with the same effect, unless otherwise specifically provided herein, as set forth in the Transaction Documents applicable to Beneficiary. All notices and communications to Guarantor with respect to this Guarantee, until Beneficiary is notified to the contrary in writing, shall be sent to Guarantor at:

JPMorgan Chase & Co.
270 Park Avenue,
New York, New York 10017-2070
Attn: Treasury Department, Regulatory and Guarantee Group- Peter W. Smith
Phone: 212-270-5815
Facsimile: 212-270-0819

All notices and communications to the Beneficiary with respect to this Guarantee, until the Guarantor is notified to the contrary in writing, shall be sent to the Beneficiary at:

[Beneficiary name and address]

- (11) **Captions.** The headings and captions in this Guarantee are for convenience only and shall not affect the interpretation or construction of this Guarantee.
- (12) **Not Insured.** This Guarantee is not insured by the Federal Deposit Insurance Corporation of the United States of America.
- (13) **Integration.** This Guarantee shall supersede any prior or contemporaneous representations, statements, agreements or guarantees, oral or written, made by or between the Guarantor and a Beneficiary with regard to the Transaction.
- (14) **GOVERNING LAW.** THIS GUARANTEE AND ALL MATTERS ARISING OUT OF OR RELATING TO THIS GUARANTEE SHALL BE GOVERNED BY, AND THIS GUARANTEE SHALL BE CONSTRUED IN ACCORDANCE WITH, THE LAWS OF THE STATE OF NEW YORK, UNITED STATES OF AMERICA, WITHOUT GIVING EFFECT TO CHOICE OF LAW PRINCIPLES THAT WOULD DIRECT THE APPLICATION OF THE SUBSTANTIVE LAW OF ANY OTHER JURISDICTION. GUARANTOR AGREES TO THE EXCLUSIVE JURISDICTION OF THE STATE AND FEDERAL COURTS LOCATED IN THE STATE OF NEW YORK, UNITED STATES OF AMERICA, OVER ANY DISPUTES ARISING UNDER OR RELATING TO THIS GUARANTEE. BENEFICIARY HEREOF, BY ACCEPTING THIS GUARANTEE, AGREES THAT IT WILL NOT BRING ANY CLAIM OR CAUSE OF ACTION AGAINST GUARANTOR UNDER OR RELATING TO THIS GUARANTEE, OF ANY KIND OR DESCRIPTION (WHETHER IN LAW, EQUITY, CONTRACT OR TORT), OR FOR RECOGNITION OR ENFORCEMENT OF ANY JUDGMENT UNDER THIS GUARANTEE, IN ANY FORUM OTHER THAN THE SUPREME COURT, NEW YORK, NEW YORK COUNTY, BOROUGH OF MANHATTAN, OR, TO THE EXTENT PERMITTED BY LAW, IN FEDERAL COURT LOCATED IN THE BOROUGH OF MANHATTAN, CITY OF NEW YORK, STATE OF NEW YORK.
- (15) **Waiver of Jury Trial.** GUARANTOR AND, BY ITS ACCEPTANCE HEREOF, BENEFICIARY, EACH HEREBY IRREVOCABLY WAIVES TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY RIGHT THAT EACH MAY HAVE TO A TRIAL BY JURY IN RESPECT OF ANY SUIT, ACTION, PROCEEDING OR COUNTERCLAIM (WHETHER BASED ON CONTRACT, TORT OR OTHERWISE) ARISING OUT OF OR RELATING TO THIS GUARANTEE OR THE NEGOTIATION, ADMINISTRATION OR ENFORCEMENT THEREOF.

IN WITNESS WHEREOF, Guarantor has caused this Guarantee to be executed in its name and on its behalf by its duly authorized officer as of the date first above written.

JPMORGAN CHASE & CO.

By: _____

Name:

Title:

ACKNOWLEDGED AND ACCEPTED
AS OF THE DATE ABOVE WRITTEN

CITY OF LONG BEACH, CALIFORNIA

NAME: _____

TITLE: _____

ISDA®

International Swaps and Derivatives Association, Inc.

CREDIT SUPPORT ANNEX

to the Schedule to the

..... Master Agreement

dated as of . . . March 28, 2012 . . .

between

J.P. MORGAN VENTURES
ENERGY CORPORATION

CITY OF LONG BEACH,
CALIFORNIA

and

.....
("Party A")

.....
("Party B")

This Annex supplements, forms part of, and is subject to, the above-referenced Agreement, is part of its Schedule and is a Credit Support Document under this Agreement with respect to each party.

Accordingly, the parties agree as follows:—

Paragraph 1. Interpretation

(a) **Definitions and Inconsistency.** Capitalized terms not otherwise defined herein or elsewhere in this Agreement have the meanings specified pursuant to Paragraph 12, and all references in this Annex to Paragraphs are to Paragraphs of this Annex. In the event of any inconsistency between this Annex and the other provisions of this Schedule, this Annex will prevail, and in the event of any inconsistency between Paragraph 13 and the other provisions of this Annex, Paragraph 13 will prevail.

(b) **Secured Party and Pledgor.** All references in this Annex to the "Secured Party" will be to either party when acting in that capacity and all corresponding references to the "Pledgor" will be to the other party when acting in that capacity; *provided, however*, that if Other Posted Support is held by a party to this Annex, all references herein to that party as the Secured Party with respect to that Other Posted Support will be to that party as the beneficiary thereof and will not subject that support or that party as the beneficiary thereof to provisions of law generally relating to security interests and secured parties.

Paragraph 2. Security Interest

Each party, as the Pledgor, hereby pledges to the other party, as the Secured Party, as security for its Obligations, and grants to the Secured Party a first priority continuing security interest in, lien on and right of Set-off against all Posted Collateral Transferred to or received by the Secured Party hereunder. Upon the Transfer by the Secured Party to the Pledgor of Posted Collateral, the security interest and lien granted hereunder on that Posted Collateral will be released immediately and, to the extent possible, without any further action by either party.

Paragraph 3. Credit Support Obligations

(a) **Delivery Amount.** Subject to Paragraphs 4 and 5, upon demand made by the Secured Party on or promptly following a Valuation Date, if the Delivery Amount for that Valuation Date equals or exceeds the Pledgor's Minimum Transfer Amount, then the Pledgor will Transfer to the Secured Party Eligible Credit Support having a Value as of the date of Transfer at least equal to the applicable Delivery Amount (rounded pursuant to Paragraph 13). Unless otherwise specified in Paragraph 13, the "**Delivery Amount**" applicable to the Pledgor for any Valuation Date will equal the amount by which:

(i) the Credit Support Amount

exceeds

(ii) the Value as of that Valuation Date of all Posted Credit Support held by the Secured Party.

(b) **Return Amount.** Subject to Paragraphs 4 and 5, upon a demand made by the Pledgor on or promptly following a Valuation Date, if the Return Amount for that Valuation Date equals or exceeds Secured Party's Minimum Transfer Amount, then the Secured Party will Transfer to the Pledgor Posted Credit Support specified by the Pledgor in that demand having a Value as of the date of Transfer as close as practicable to the applicable Return Amount (rounded pursuant to Paragraph 13). Unless otherwise specified in Paragraph 13, the "**Return Amount**" applicable to the Secured Party for any Valuation Date will equal the amount by which:

(i) the Value as of that Valuation Date of all Posted Credit Support held by the Secured Party

exceeds

(ii) the Credit Support Amount.

"**Credit Support Amount**" means, unless otherwise specified in Paragraph 13, for any Valuation Date (i) the Secured Party's Exposure for that Valuation Date plus (ii) the aggregate of all Independent Amounts applicable to the Pledgor, if any, minus (iii) all Independent Amounts applicable to the Secured Party, if any, minus (iv) the Pledgor's Threshold; *provided, however*, that the Credit Support Amount will be deemed to be zero whenever the calculation of Credit Support Amount yields a number less than zero.

Paragraph 4. Conditions Precedent, Transfer Timing, Calculations and Substitutions

(a) **Conditions Precedent.** Each Transfer obligation of the Pledgor under Paragraphs 3 and 5 and of the Secured Party under Paragraphs 3, 4(d)(ii), 5 and 6(d) is subject to the conditions precedent that:

(i) no Event of Default, Potential Event of Default or Specified Condition has occurred and is continuing with respect to the other party; and

(ii) no Early Termination Date for which any unsatisfied payment obligations exist has occurred or been designated as the result of an Event of Default or Specified Condition with respect to the other party.

(b) **Transfer Timing.** Subject to Paragraphs 4(a) and 5 and unless otherwise specified, if a demand for the Transfer of Eligible Credit Support or Posted Credit Support is made by the Notification Time, then the relevant Transfer will be made not later than the close of business on the next Local Business Day; if a demand is made after the Notification Time, then the relevant Transfer will be made not later than the close of business on the second Local Business Day thereafter.

(c) **Calculations.** All calculations of Value and Exposure for purposes of Paragraphs 3 and 6(d) will be made by the Valuation Agent as of the Valuation Time. The Valuation Agent will notify each party (or the other party, if the Valuation Agent is a party) of its calculations not later than the Notification Time on the Local Business Day following the applicable Valuation Date (or in the case of Paragraph 6(d), following the date of calculation).

(d) ***Substitutions.***

(i) Unless otherwise specified in Paragraph 13, upon notice to the Secured Party specifying the items of Posted Credit Support to be exchanged, the Pledgor may, on any Local Business Day, Transfer to the Secured Party substitute Eligible Credit Support (the "Substitute Credit Support"); and

(ii) subject to Paragraph 4(a), the Secured Party will Transfer to the Pledgor the items of Posted Credit Support specified by the Pledgor in its notice not later than the Local Business Day following the date on which the Secured Party receives the Substitute Credit Support, unless otherwise specified in Paragraph 13 (the "Substitution Date"); *provided* that the Secured Party will only be obligated to Transfer Posted Credit Support with a Value as of the date of Transfer of that Posted Credit Support equal to the Value as of that date of the Substitute Credit Support.

Paragraph 5. Dispute Resolution

If a party (a "Disputing Party") disputes (I) the Valuation Agent's calculation of a Delivery Amount or a Return Amount or (II) the Value of any Transfer of Eligible Credit Support or Posted Credit Support, then (1) the Disputing Party will notify the other party and the Valuation Agent (if the Valuation Agent is not the other party) not later than the close of business on the Local Business Day following (X) the date that the demand is made under Paragraph 3 in case of (I) above or (Y) the date of Transfer in the case of (II) above, (2) subject to Paragraph 4(a), the appropriate party will Transfer the undisputed amount to the other party not later than the close of business on the Local Business Day following (X) the date that the demand is made under Paragraph 3 in the case of (I) above or (Y) the date of Transfer in the case of (II) above, (3) the parties will consult with each other in an attempt to resolve the dispute and (4) if they fail to resolve the dispute by the Resolution Time, then:

(i) In the case of a dispute involving a Delivery Amount or Return Amount, unless otherwise specified in Paragraph 13, the Valuation Agent will recalculate the Exposure and the Value as of the Recalculation Date by:

(A) utilizing any calculations of Exposure for the Transactions (or Swap Transactions) that the parties have agreed are not in dispute;

(B) calculating the Exposure for the Transactions (or Swap Transactions) in dispute by seeking four actual quotations at mid-market from Reference Market-makers for purposes of calculating Market Quotation, and taking the arithmetic average of those obtained; *provided* that if four quotations are not available for a particular Transaction (or Swap Transaction), then fewer than four quotations may be used for that Transaction (or Swap Transaction); and if no quotations are available for a particular Transaction (or Swap Transaction), then the Valuation Agent's original calculations will be used for that Transaction (or Swap Transaction); and

(C) utilizing the procedures specified in Paragraph 13 for calculating the Value, if disputed, of Posted Credit Support.

(ii) In the case of a dispute involving the Value of any Transfer of Eligible Credit Support or Posted Credit Support, the Valuation Agent will recalculate the Value as of the date of Transfer pursuant to Paragraph 13.

Following a recalculation pursuant to this Paragraph, the Valuation Agent will notify each party (or the other party, if the Valuation Agent is a party) not later than the Notification Time on the Local Business Day following the Resolution Time. The appropriate party will, upon demand following that notice by the Valuation Agent or a resolution pursuant to (3) above and subject to Paragraphs 4(a) and 4(b), make the appropriate Transfer.

Paragraph 6. Holding and Using Posted Collateral

(a) **Care of Posted Collateral.** Without limiting the Secured Party's rights under Paragraph 6(c), the Secured Party will exercise reasonable care to assure the safe custody of all Posted Collateral to the extent required by applicable law, and in any event the Secured Party will be deemed to have exercised reasonable care if it exercises at least the same degree of care as it would exercise with respect to its own property. Except as specified in the preceding sentence, the Secured Party will have no duty with respect to Posted Collateral, including, without limitation, any duty to collect any Distributions, or enforce or preserve any rights pertaining thereto.

(b) **Eligibility to Hold Posted Collateral; Custodians.**

(i) **General.** Subject to the satisfaction of any conditions specified in Paragraph 13 for holding Posted Collateral, the Secured Party will be entitled to hold Posted Collateral or to appoint an agent (a "Custodian") to hold Posted Collateral for the Secured Party. Upon notice by the Secured Party to the Pledgor of the appointment of a Custodian, the Pledgor's obligations to make any Transfer will be discharged by making the Transfer to that Custodian. The holding of Posted Collateral by a Custodian will be deemed to be the holding of that Posted Collateral by the Secured Party for which the Custodian is acting.

(ii) **Failure to Satisfy Conditions.** If the Secured Party or its Custodian fails to satisfy any conditions for holding Posted Collateral, then upon a demand made by the Pledgor, the Secured Party will, not later than five Local Business Days after the demand, Transfer or cause its Custodian to Transfer all Posted Collateral held by it to a Custodian that satisfies those conditions or to the Secured Party if it satisfies those conditions.

(iii) **Liability.** The Secured Party will be liable for the acts or omissions of its Custodian to the same extent that the Secured Party would be liable hereunder for its own acts or omissions.

(c) **Use of Posted Collateral.** Unless otherwise specified in Paragraph 13 and without limiting the rights and obligations of the parties under Paragraphs 3, 4(d)(ii), 5, 6(d) and 8, if the Secured Party is not a Defaulting Party or an Affected Party with respect to a Specified Condition and no Early Termination Date has occurred or been designated as the result of an Event of Default or Specified Condition with respect to the Secured Party, then the Secured Party will, notwithstanding Section 9-207 of the New York Uniform Commercial Code, have the right to:

(i) sell, pledge, rehypothecate, assign, invest, use, commingle or otherwise dispose of, or otherwise use in its business any Posted Collateral it holds, free from any claim or right of any nature whatsoever of the Pledgor, including any equity or right of redemption by the Pledgor; and

(ii) register any Posted Collateral in the name of the Secured Party, its Custodian or a nominee for either.

For purposes of the obligation to Transfer Eligible Credit Support or Posted Credit Support pursuant to Paragraphs 3 and 5 and any rights or remedies authorized under this Agreement, the Secured Party will be deemed to continue to hold all Posted Collateral and to receive Distributions made thereon, regardless of whether the Secured Party has exercised any rights with respect to any Posted Collateral pursuant to (i) or (ii) above.

(d) **Distributions and Interest Amount.**

(i) **Distributions.** Subject to Paragraph 4(a), if the Secured Party receives or is deemed to receive Distributions on a Local Business Day, it will Transfer to the Pledgor not later than the following Local Business Day any Distributions it receives or is deemed to receive to the extent that a Delivery Amount would not be created or increased by that Transfer, as calculated by the Valuation Agent (and the date of calculation will be deemed to be a Valuation Date for this purpose).

(ii) **Interest Amount.** Unless otherwise specified in Paragraph 13 and subject to Paragraph 4(a), in lieu of any interest, dividends or other amounts paid or deemed to have been paid with respect to Posted Collateral in the form of Cash (all of which may be retained by the Secured Party), the Secured Party will Transfer to the Pledgor at the times specified in Paragraph 13 the Interest Amount to the extent that a Delivery Amount would not be created or increased by that Transfer, as calculated by the Valuation Agent (and the date of calculation will be deemed to be a Valuation Date for this purpose). The Interest Amount or portion thereof not Transferred pursuant to this Paragraph will constitute Posted Collateral in the form of Cash and will be subject to the security interest granted under Paragraph 2.

Paragraph 7. Events of Default

For purposes of Section 5(a)(iii)(1) of this Agreement, an Event of Default will exist with respect to a party if:

- (i) that party fails (or fails to cause its Custodian) to make, when due, any Transfer of Eligible Collateral, Posted Collateral or the Interest Amount, as applicable, required to be made by it and that failure continues for two Local Business Days after notice of that failure is given to that party;
- (ii) that party fails to comply with any restriction or prohibition specified in this Annex with respect to any of the rights specified in Paragraph 6(c) and that failure continues for five Local Business Days after notice of that failure is given to that party; or
- (iii) that party fails to comply with or perform any agreement or obligation other than those specified in Paragraphs 7(i) and 7(ii) and that failure continues for 30 days after notice of that failure is given to that party.

Paragraph 8. Certain Rights and Remedies

(a) **Secured Party's Rights and Remedies.** If at any time (1) an Event of Default or Specified Condition with respect to the Pledgor has occurred and is continuing or (2) an Early Termination Date has occurred or been designated as the result of an Event of Default or Specified Condition with respect to the Pledgor, then, unless the Pledgor has paid in full all of its Obligations that are then due, the Secured Party may exercise one or more of the following rights and remedies:

- (i) all rights and remedies available to a secured party under applicable law with respect to Posted Collateral held by the Secured Party;
- (ii) any other rights and remedies available to the Secured Party under the terms of Other Posted Support, if any;
- (iii) the right to Set-off any amounts payable by the Pledgor with respect to any Obligations against any Posted Collateral or the Cash equivalent of any Posted Collateral held by the Secured Party (or any obligation of the Secured Party to Transfer that Posted Collateral); and
- (iv) the right to liquidate any Posted Collateral held by the Secured Party through one or more public or private sales or other dispositions with such notice, if any, as may be required under applicable law, free from any claim or right of any nature whatsoever of the Pledgor, including any equity or right of redemption by the Pledgor (with the Secured Party having the right to purchase any or all of the Posted Collateral to be sold) and to apply the proceeds (or the Cash equivalent thereof) from the liquidation of the Posted Collateral to any amounts payable by the Pledgor with respect to any Obligations in that order as the Secured Party may elect.

Each party acknowledges and agrees that Posted Collateral in the form of securities may decline speedily in value and is of a type customarily sold on a recognized market, and, accordingly, the Pledgor is not entitled to prior notice of any sale of that Posted Collateral by the Secured Party, except any notice that is required under applicable law and cannot be waived.

(b) **Pledgor's Rights and Remedies.** If at any time an Early Termination Date has occurred or been designated as the result of an Event of Default or Specified Condition with respect to the Secured Party, then (except in the case of an Early Termination Date relating to less than all Transactions (or Swap Transactions) where the Secured Party has paid in full all of its obligations that are then due under Section 6(e) of this Agreement):

(i) the Pledgor may exercise all rights and remedies available to a Pledgor under applicable law with respect to Posted Collateral held by the Secured Party;

(ii) the Pledgor may exercise any other rights and remedies available to the Pledgor under the terms of Other Posted Support, if any;

(iii) the Secured Party will be obligated immediately to Transfer all Posted Collateral and the Interest Amount to the Pledgor; and

(iv) to the extent that Posted Collateral or the Interest Amount is not so Transferred pursuant to (iii) above, the Pledgor may:

(A) Set-off any amounts payable by the Pledgor with respect to any Obligations against any Posted Collateral or the Cash equivalent of any Posted Collateral held by the Secured Party (or any obligation of the Secured Party to Transfer that Posted Collateral); and

(B) to the extent that the Pledgor does not Set-off under (iv)(A) above, withhold payment of any remaining amounts payable by the Pledgor with respect to any Obligations, up to the Value of any remaining Posted Collateral held by the Secured Party, until that Posted Collateral is Transferred to the Pledgor.

(c) **Deficiencies and Excess Proceeds.** The Secured Party will Transfer to the Pledgor any proceeds and Posted Credit Support remaining after liquidation, Set-off and/or application under Paragraphs 8(a) and 8(b) after satisfaction in full of all amounts payable by the Pledgor with respect to any Obligations; the Pledgor in all events will remain liable for any amounts remaining unpaid after any liquidation, Set-off and/or application under Paragraphs 8(a) and 8(b).

(d) **Final Returns.** When no amounts are or thereafter may become payable by the Pledgor with respect to any Obligations (except for any potential liability under Section 2(d) of this Agreement), the Secured Party will Transfer to the Pledgor all Posted Credit Support and the Interest Amount, if any.

Paragraph 9. Representations

Each party represents to the other party (which representations will be deemed to be repeated as of each date on which it, as the Pledgor, Transfers Eligible Collateral) that:

(i) it has the power to grant a security interest in and lien on any Eligible Collateral it Transfers as the Pledgor and has taken all necessary actions to authorize the granting of that security interest and lien;

(ii) it is the sole owner of or otherwise has the right to Transfer all Eligible Collateral it Transfers to the Secured Party hereunder, free and clear of any security interest, lien, encumbrance or other restrictions other than the security interest and lien granted under Paragraph 2;

(iii) upon the Transfer of any Eligible Collateral to the Secured Party under the terms of this Annex, the Secured Party will have a valid and perfected first priority security interest therein (assuming that any central clearing corporation or any third-party financial intermediary or other entity not within the control of the Pledgor involved in the Transfer of that Eligible Collateral gives the notices and takes the action required of it under applicable law for perfection of that interest); and

(iv) the performance by it of its obligations under this Annex will not result in the creation of any security interest, lien or other encumbrance on any Posted Collateral other than the security interest and lien granted under Paragraph 2.

Paragraph 10. Expenses

- (a) **General.** Except as otherwise provided in Paragraphs 10(b) and 10(c), each party will pay its own costs and expenses in connection with performing its obligations under this Annex and neither party will be liable for any costs and expenses incurred by the other party in connection herewith.
- (b) **Posted Credit Support.** The Pledgor will promptly pay when due all taxes, assessments or charges of any nature that are imposed with respect to Posted Credit Support held by the Secured Party upon becoming aware of the same, regardless of whether any portion of that Posted Credit Support is subsequently disposed of under Paragraph 6(c), except for those taxes, assessments and charges that result from the exercise of the Secured Party's rights under Paragraph 6(c).
- (c) **Liquidation/Application of Posted Credit Support.** All reasonable costs and expenses incurred by or on behalf of the Secured Party or the Pledgor in connection with the liquidation and/or application of any Posted Credit Support under Paragraph 8 will be payable, on demand and pursuant to the Expenses Section of this Agreement, by the Defaulting Party or, if there is no Defaulting Party, equally by the parties.

Paragraph 11. Miscellaneous

- (a) **Default Interest.** A Secured Party that fails to make, when due, any Transfer of Posted Collateral or the Interest Amount will be obliged to pay the Pledgor (to the extent permitted under applicable law) an amount equal to interest at the Default Rate multiplied by the Value of the items of property that were required to be Transferred, from (and including) the date that the Posted Collateral or Interest Amount was required to be Transferred to (but excluding) the date of Transfer of that Posted Collateral or Interest Amount. This interest will be calculated on the basis of daily compounding and the actual number of days elapsed.
- (b) **Further Assurances.** Promptly following a demand made by a party, the other party will execute, deliver, file and record any financing statement, specific assignment or other document and take any other action that may be necessary or desirable and reasonably requested by that party to create, preserve, perfect or validate any security interest or lien granted under Paragraph 2, to enable that party to exercise or enforce its rights under this Annex with respect to Posted Credit Support or an Interest Amount or to effect or document a release of a security interest on Posted Collateral or an Interest Amount.
- (c) **Further Protection.** The Pledgor will promptly give notice to the Secured Party of, and defend against, any suit, action, proceeding or lien that involves Posted Credit Support Transferred by the Pledgor or that could adversely affect the security interest and lien granted by it under Paragraph 2, unless that suit, action, proceeding or lien results from the exercise of the Secured Party's rights under Paragraph 6(c).
- (d) **Good Faith and Commercially Reasonable Manner.** Performance of all obligations under this Annex, including, but not limited to, all calculations, valuations and determinations made by either party, will be made in good faith and in a commercially reasonable manner.
- (e) **Demands and Notices.** All demands and notices made by a party under this Annex will be made as specified in the Notices Section of this Agreement, except as otherwise provided in Paragraph 13.
- (f) **Specifications of Certain Matters.** Anything referred to in this Annex as being specified in Paragraph 13 also may be specified in one or more Confirmations or other documents and this Annex will be construed accordingly.

Paragraph 12. Definitions

As used in this Annex:—

“*Cash*” means the lawful currency of the United States of America.

“*Credit Support Amount*” has the meaning specified in Paragraph 3.

“*Custodian*” has the meaning specified in Paragraphs 6(b)(i) and 13.

“*Delivery Amount*” has the meaning specified in Paragraph 3(a).

“*Disputing Party*” has the meaning specified in Paragraph 5.

“*Distributions*” means with respect to Posted Collateral other than Cash, all principal, interest and other payments and distributions of cash or other property with respect thereto, regardless of whether the Secured Party has disposed of that Posted Collateral under Paragraph 6(c). Distributions will not include any item of property acquired by the Secured Party upon any disposition or liquidation of Posted Collateral or, with respect to any Posted Collateral in the form of Cash, any distributions on that collateral, unless otherwise specified herein.

“*Eligible Collateral*” means, with respect to a party, the items, if any, specified as such for that party in Paragraph 13.

“*Eligible Credit Support*” means Eligible Collateral and Other Eligible Support.

“*Exposure*” means for any Valuation Date or other date for which Exposure is calculated and subject to Paragraph 5 in the case of a dispute, the amount, if any, that would be payable to a party that is the Secured Party by the other party (expressed as a positive number) or by a party that is the Secured Party to the other party (expressed as a negative number) pursuant to Section 6(e)(ii)(2)(A) of this Agreement as if all Transactions (or Swap Transactions) were being terminated as of the relevant Valuation Time; *provided* that Market Quotation will be determined by the Valuation Agent using its estimates at mid-market of the amounts that would be paid for Replacement Transactions (as that term is defined in the definition of “Market Quotation”).

“*Independent Amount*” means, with respect to a party, the amount specified as such for that party in Paragraph 13; if no amount is specified, zero.

“*Interest Amount*” means, with respect to an Interest Period, the aggregate sum of the amounts of interest calculated for each day in that Interest Period on the principal amount of Posted Collateral in the form of Cash held by the Secured Party on that day, determined by the Secured Party for each such day as follows:

- (x) the amount of Cash on that day; multiplied by
- (y) the Interest Rate in effect for that day; divided by
- (z) 360.

“*Interest Period*” means the period from (and including) the last Local Business Day on which an Interest Amount was Transferred (or, if no Interest Amount has yet been Transferred, the Local Business Day on which Posted Collateral in the form of Cash was Transferred to or received by the Secured Party) to (but excluding) the Local Business Day on which the current Interest Amount is to be Transferred.

“*Interest Rate*” means the rate specified in Paragraph 13.

“*Local Business Day*”, unless otherwise specified in Paragraph 13, has the meaning specified in the Definitions Section of this Agreement, except that references to a payment in clause (b) thereof will be deemed to include a Transfer under this Annex.

“Minimum Transfer Amount” means, with respect to a party, the amount specified as such for that party in Paragraph 13; if no amount is specified, zero.

“Notification Time” has the meaning specified in Paragraph 13.

“Obligations” means, with respect to a party, all present and future obligations of that party under this Agreement and any additional obligations specified for that party in Paragraph 13.

“Other Eligible Support” means, with respect to a party, the items, if any, specified as such for that party in Paragraph 13.

“Other Posted Support” means all Other Eligible Support Transferred to the Secured Party that remains in effect for the benefit of that Secured Party.

“Pledgor” means either party, when that party (i) receives a demand for or is required to Transfer Eligible Credit Support under Paragraph 3(a) or (ii) has Transferred Eligible Credit Support under Paragraph 3(a).

“Posted Collateral” means all Eligible Collateral, other property, Distributions, and all proceeds thereof that have been Transferred to or received by the Secured Party under this Annex and not Transferred to the Pledgor pursuant to Paragraph 3(b), 4(d)(ii) or 6(d)(i) or released by the Secured Party under Paragraph 8. Any Interest Amount or portion thereof not Transferred pursuant to Paragraph 6(d)(ii) will constitute Posted Collateral in the form of Cash.

“Posted Credit Support” means Posted Collateral and Other Posted Support.

“Recalculation Date” means the Valuation Date that gives rise to the dispute under Paragraph 5; *provided, however,* that if a subsequent Valuation Date occurs under Paragraph 3 prior to the resolution of the dispute, then the “Recalculation Date” means the most recent Valuation Date under Paragraph 3.

“Resolution Time” has the meaning specified in Paragraph 13.

“Return Amount” has the meaning specified in Paragraph 3(b).

“Secured Party” means either party, when that party (i) makes a demand for or is entitled to receive Eligible Credit Support under Paragraph 3(a) or (ii) holds or is deemed to hold Posted Credit Support.

“Specified Condition” means, with respect to a party, any event specified as such for that party in Paragraph 13.

“Substitute Credit Support” has the meaning specified in Paragraph 4(d)(i).

“Substitution Date” has the meaning specified in Paragraph 4(d)(ii).

“Threshold” means, with respect to a party, the amount specified as such for that party in Paragraph 13; if no amount is specified, zero.

“Transfer” means, with respect to any Eligible Credit Support, Posted Credit Support or Interest Amount, and in accordance with the instructions of the Secured Party, Pledgor or Custodian, as applicable:

(i) in the case of Cash, payment or delivery by wire transfer into one or more bank accounts specified by the recipient;

(ii) in the case of certificated securities that cannot be paid or delivered by book-entry, payment or delivery in appropriate physical form to the recipient or its account accompanied by any duly executed instruments of transfer, assignments in blank, transfer tax stamps and any other documents necessary to constitute a legally valid transfer to the recipient;

(iii) in the case of securities that can be paid or delivered by book-entry, the giving of written instructions to the relevant depository institution or other entity specified by the recipient, together with a written copy thereof to the recipient, sufficient if complied with to result in a legally effective transfer of the relevant interest to the recipient; and

(iv) in the case of Other Eligible Support or Other Posted Support, as specified in Paragraph 13.

“*Valuation Agent*” has the meaning specified in Paragraph 13.

“*Valuation Date*” means each date specified in or otherwise determined pursuant to Paragraph 13.

“*Valuation Percentage*” means, for any item of Eligible Collateral, the percentage specified in Paragraph 13.

“*Valuation Time*” has the meaning specified in Paragraph 13.

“*Value*” means for any Valuation Date or other date for which Value is calculated and subject to Paragraph 5 in the case of a dispute, with respect to:

- (i) Eligible Collateral or Posted Collateral that is:
 - (A) Cash, the amount thereof; and
 - (B) a security, the bid price obtained by the Valuation Agent multiplied by the applicable Valuation Percentage, if any;
- (ii) Posted Collateral that consists of items that are not specified as Eligible Collateral, zero; and
- (iii) Other Eligible Support and Other Posted Support, as specified in Paragraph 13.

CREDIT SUPPORT ANNEX

**to the Schedule to the
Master Agreement**

dated as of March 28, 2012

between

**J.P. MORGAN VENTURES ENERGY
CORPORATION**, a corporation
organized and existing under the laws of
the State of Delaware
("Party A")

and

**CITY OF LONG BEACH,
CALIFORNIA**, a municipality organized
under the laws of the State of California
("Party B")

Paragraph 13. Elections and Variables

(a) **Security Interest for "Obligations"**. The term "Obligations" as used in this Annex includes no additional obligations with respect to either party.

(b) **Credit Support Obligations.**

(i) **Delivery Amount, Return Amount and Credit Support Amount.**

(A) **"Delivery Amount"** has the meaning specified in Paragraph 3(a).

(B) **"Return Amount"** has the meaning specified in Paragraph 3(b).

(C) **"Credit Support Amount"** has the meaning specified in Paragraph 3(b).

(ii) **Eligible Collateral.** The following items will qualify as "Eligible Collateral":

	Party A	Party B	VALUATION PERCENTAGE
CASH	[X]	[X]	100%

(iii) **Other Eligible Support.** The following items will qualify as "Other Eligible Support" for Party A and Party B.

	Party A	Party B	VALUATION PERCENTAGE
Letters of Credit	[X]	[X]	100% unless either (i) a Letter of Credit Default shall apply with respect to such a Letter of Credit or (ii) twenty (20) or fewer Local Business Days remain prior to the expiration of such Letter of Credit, in which case the Valuation Percentage shall be 0.

Other than as stated above, there shall be no "Other Eligible Support" for either party for purposes of this Annex, unless agreed in writing between the parties.

(iv) **Thresholds.**

- (A) **"Independent Amount"** means with respect to Party A: \$0.
"Independent Amount" means with respect to Party B: \$0.
- (B) **"Threshold"** means, with respect to a party, the amounts determined on the basis of the lower of the Credit Ratings set forth in the following table for such party or in the case of Party A, its Credit Support Provider provided, however, that if (i) a party or its Credit Support Provider, as applicable, has no Credit Rating, or (ii) an Event of Default has occurred and is continuing with respect to such party, such party's Threshold shall be U.S.\$0:

CREDIT RATING (S&P / Moody's)	THRESHOLD <u>Party A</u>	THRESHOLD <u>Party B</u>
A+/A1 or above	US\$25,000,000	US\$25,000,000
A/A2	US\$15,000,000	US\$15,000,000
A-/A3	US\$10,000,000	US\$10,000,000
BBB+/Baa1	US\$5,000,000	US\$5,000,000
BBB/Baa2 or below	US\$0	US\$0

- (C) **"Minimum Transfer Amount"** means, with respect to a party, U.S.\$1.
- (D) **Rounding.** The Delivery Amount and the Return Amount will be rounded up and down to the nearest integral multiple of U.S.\$250,000, respectively.

(c) **Valuation and Timing.**

(i) **"Valuation Agent"** means, for purposes of Paragraphs 3 and 5, the party making the demand under Paragraph 3 and, for purposes of Paragraph 6(d), the Secured Party receiving or deemed to receive the Distributions or the Interest Amount, as applicable, unless there has occurred and is continuing any Event of Default, Potential Event of Default or Additional Termination Event with respect to such party, in which case the other party shall be the Valuation Agent.

(ii) **"Valuation Date"** means any Local Business Day.

(iii) **"Valuation Time"** means the close of business in the city of the Valuation Agent on the Local Business Day immediately preceding the Valuation Date or date of calculation, as applicable; provided that the calculations of Value and Exposure will be made as of approximately the same time on the same date.

(iv) **"Notification Time"** means by 1:00 p.m., New York time, on a Local Business Day.

(d) **Conditions Precedent.** With respect to Party A, Credit Event Upon Merger, any Additional Termination Event or Force Majeure Event (if Party A is the Affected Party with respect to such Termination Event or Force Majeure Event) will be a "Specified Condition". With respect to Party B, Credit Event Upon Merger, any Additional Termination Event or Force Majeure Event (if Party B is the Affected Party with respect to such Termination Event or Force Majeure Event) will be a "Specified Condition".

(e) **Substitution.**

(i) **"Substitution Date"** has the meaning specified in Paragraph 4(d)(ii).

(ii) **Consent.** Inapplicable.

(f) **Dispute Resolution.**

(i) **"Resolution Time"** means 1:00 p.m, New York time, on the Local Business Day following the date on which notice is given that gives rise to a dispute under Paragraph 5.

(ii) **Value.** For the purpose of Paragraphs 5(i)(C) and 5(ii), the Value of Posted Credit Support in the form of Cash shall be the actual face value thereof.

(iii) **Alternative.** The provisions of Paragraph 5 will apply.

(g) **Holding and Using Posted Collateral.**

(i) **Eligibility to Hold Posted Collateral; Custodians.**

Party A will be entitled to hold Posted Collateral itself or through a Custodian pursuant to Paragraph 6(b), provided that the following conditions applicable to it are satisfied:

(1) Party A is not a Defaulting Party and Party A's Credit Support Provider has a Credit Rating from S&P or Moody's and the lowest Credit Rating for Party

A's Credit Support Provider is "BBB-" or higher by S&P or "Baa3" or higher by Moody's; and

- (2) The Custodian is a Qualified Institution (as defined below).

Initially the Custodian for Party A is: Not applicable

In addition, each time that Posted Collateral is posted by Party B to Party A to be held by Party A, Party A shall deposit such Posted Collateral with a Bank (as defined in the Federal Deposit Insurance Act) whose Credit Rating is at least BBB+ by S&P or Baa1 by Moody's.

Party B will be entitled to hold Posted Collateral itself or through a Custodian pursuant to Paragraph 6(b), provided that the following conditions applicable to it are satisfied:

- (1) Party B is not a Defaulting Party and Party B has a Credit Rating from S&P or Moody's and the lowest Credit Rating for Party B's Credit Support Provider is "BBB-" or higher by S&P or "Baa3" or higher by Moody's; and
- (2) The Custodian is a Qualified Institution (as defined below).

Initially the Custodian for Party B is: Not applicable

In addition, each time that Posted Collateral is posted by Party A to Party B to be held by Party B, Party B shall deposit such Posted Collateral with a Bank (as defined in the Federal Deposit Insurance Act) whose Credit Rating is at least BBB+ by S&P or Baa1 by Moody's.

(ii) ***Use of Posted Collateral.***

The provisions of Paragraph 6(c) will apply to the parties; provided, however, that if a party or its Custodian is not eligible to hold Posted Collateral pursuant to Paragraph 13(g)(i) (the event that caused it or its Custodian, if any, to be ineligible to hold Posted Collateral shall be a "**Credit Rating Event**"; if such Credit Rating Event occurs with respect to a party, such party shall be the "**Downgraded Party**"; and if such Credit Rating Event occurs with respect to a party's Custodian, such Custodian shall be the "**Downgraded Custodian**"), then:

(1) the provisions of Paragraph 6(c) will not apply with respect to the Downgraded Party as the Secured Party for so long as either the Secured Party or its Custodian, if any remain a Downgraded Party or a Downgraded Custodian, respectively.

(2) the Downgraded Party shall be required to deliver (or in the case of a Downgraded Custodian, cause the Downgraded Custodian to deliver, as the case may be) not later than the close of business on the second Local Business Day following such Credit Rating Event all Posted Collateral in its possession or held on its behalf to a Qualified Institution to a segregated, safekeeping or custody account ("Collateral Account") within such Qualified Institution with the title of the Collateral Account indicating that the property contained therein is being held as Posted Collateral for such party; provided, that, if the Credit Rating Event occurs with respect to a party's Custodian that is holding Posted Collateral on behalf of such party, then such Downgraded Custodian may also deliver such Posted Collateral to such party if such party is not a Downgraded Party. The Qualified Institution shall serve as Custodian with respect to the Posted Collateral in the Collateral Account, and shall hold such Posted Collateral in accordance with the terms of this Annex and for the security interest of the Downgraded Party and, subject to such security interest, for the ownership of the other party.

(iii) Paragraph 6(b)(ii) is deleted and replaced with the following:

"Failure by a party or its Custodian to comply with any of the obligations under this Paragraph 13(g) will constitute an Event of Default under Section 5(a)(iii)(1) with respect to such party if the failure continues for two (2) Local Business Days after notice of the failure is given to that party

(h) **Distributions and Interest Amount.**

(i) **Interest Rate.** "**Interest Rate**" means, for any day, the greater of (x) 0% or (y) the Federal Funds Overnight Rate. For the purposes hereof, "Federal Funds Overnight

Rate" means, for any day, an interest rate per annum equal to the rate published as the Federal Funds Effective Rate that appears on Reuters Page FEDM or on Bloomberg Page FEDL01 for such day.

(ii) **Transfer of Interest Amount.** The transfer of the Interest Amount will be made monthly on the second Local Business Day of each calendar month.

(iii) **Alternative to Interest Amount.** The provisions of Paragraph 6(d)(ii) will apply.

(i) **Additional Representations.** None.

(j) **Other Eligible Support and Other Posted Support.**

(i) **"Value"** with respect to Other Eligible Support and Other Posted Support means: The Valuation Percentage times the stated amount then available under the Letter of Credit which can be unconditionally drawn by the Secured Party.

(ii) **"Transfer"** with respect to Other Eligible Support and Other Posted Support means: For purposes of Paragraph 3(a), delivery of the Letter of Credit by the Pledgor to the Secured Party at the address specified in this Annex or delivery of an executed amendment to such Letter of Credit (extending the term or increasing the amount available to the Secured Party thereunder) by the Pledgor to the Secured Party at the address specified in this Annex; and for purposes of Paragraph 3(b), return of the Letter of Credit by the Secured Party to the Pledgor, at the address specified in this Annex, or delivery of an executed amendment to the Letter of Credit in form and substance satisfactory to the Secured Party, reducing the amount available to the Secured Party thereunder by the Pledgor to the Secured Party at the address specified in this Annex.

(iii) All Other Eligible Support and Other Posted Support consisting of Letters of Credit shall be issued and maintained in accordance with the provisions set forth in Exhibit A and Schedule 1 attached hereto.

(k) **Demands and Notices.**

(i) All demands, specifications and notices made by a party to this Annex will be made pursuant to the Notices Section of this Agreement, unless otherwise specified here:

With respect to Party A:

J.P. Morgan Ventures Energy Corporation
Collateral Middle Office Americas 3/OPS2
500 Stanton Christiana Road
Newark, Delaware 19713
Telephone No.: (302) 634-3154
Facsimile No.: (302) 634-3270
Email: collateral_services@jpmorgan.com

With respect to Party B:

City of Long Beach
Attn: Director, Gas and Oil Department
2400 E. Spring Street, Long Beach, CA 90806
Telephone No.: 562-570-2001
Facsimile No.: 562-570-2008

(I) **Other Provisions.**

(A) **Transactions.** References throughout this Annex to "Swap Transactions" are deleted.

(B) **Paragraph 7. Event of Default.** Subparagraph (i) of Paragraph 7 of the Credit Support Annex is hereby amended by (i) deleting the words "Eligible Collateral, Posted Collateral" and replacing them with the words "Eligible Credit Support, Posted Credit Support" and (ii) deleting the phrase "two Local Business Days" and inserting in lieu thereof the phrase "one Local Business Day."

(C) **Paragraph 12. Definitions.** Paragraph 12 of the Credit Support Annex is hereby amended as follows:

(i) The following definitions are added:

"**Credit Rating**" means with respect to any entity, on any date of determination, the respective ratings then assigned to such entity's unsecured, senior long-term debt (not supported by third party credit enhancement) by S&P, Moody's or any other specified rating agency or agencies or if such entity does not have a rating for its unsecured, senior long-term debt, then the rating assigned to such entity by such rating agency as its corporate credit rating or long term issuer rating, as applicable.

"**Issuer**" means the bank issuing a Letter of Credit at the request of the Pledgor that meets the requirements set forth in the definition of Letter of Credit herein.

"**Letter of Credit**" means an irrevocable, transferable, standby letter of credit, issued by a major U.S. commercial bank or a U.S. branch office of a foreign bank which in either case is satisfactory to Secured Party in Secured Party's reasonable discretion and with a Credit Rating of at least "A" by S&P and "A2" by Moody's and which bank is not an affiliate of the Pledgor, utilizing the form set forth in Schedule 1 attached hereto, with such changes to the terms in that form as the Issuer may require and as may be acceptable to the party in whose favor such letter of credit is issued; provided, however, if the issuing bank is JPMorgan Chase Bank, National Association and the beneficiary of the Letter of Credit is J.P. Morgan Ventures Energy Corporation, then the Letter of Credit shall be governed by the ISP and not the UCP. Each Letter of Credit shall be a Credit Support Document.


"**Moody's**" means Moody's Investors Service, Inc. or its successor.

“Qualified Institution” means a Bank (as defined in the Federal Deposit Insurance Act) whose rating with respect to its long term unsecured, unsubordinated indebtedness is at least A by S&P and A2 by Moody's.


“S&P” means the Standard & Poor's Rating Group (a division of The McGraw Hill Companies, Inc.) or its successor.

Please confirm your agreement to the terms of the foregoing Paragraph 13 by signing below.

J.P. MORGAN VENTURES ENERGY CORPORATION
(Party A)

By: 
Name: John Johnson
Title: VICE PRESIDENT
Date: 3/28/12

CITY OF LONG BEACH, CALIFORNIA
(Party B)

By:  **Assistant City Manager**
Name: Patrick H. West
Title: City Manager
Date: 4-11-12

EXECUTED PURSUANT
TO SECTION 301 OF
THE CITY CHARTER.


APPROVED AS TO FORM
4.5 20 12
ROBERT E. SHANNON, City Attorney
By: 
RICHARD ANTHONY
DEPUTY CITY ATTORNEY

EXHIBIT A
to Paragraph 13
LETTER OF CREDIT PROVISIONS

Letters of Credit. Other Posted Support provided by one party ("X") for the benefit of the other ("Y") in the form of a Letter of Credit shall be subject to the following provisions.

- (a) Any Letter of Credit shall be delivered by X or the Issuer to such address as Y shall specify and shall be maintained for the benefit of Y. X shall (i) cause the renewal of each outstanding Letter of Credit on a timely basis as provided in the relevant Letter of Credit, (ii) if the Issuer of an outstanding Letter of Credit has indicated its intent not to renew such Letter of Credit, provide either a substitute Letter of Credit or other Eligible Credit Support, in each case at least twenty (20) Local Business Days prior to the expiration of the outstanding Letter of Credit, and (iii) if the Issuer shall fail to honor Y's properly documented request to draw on an outstanding Letter of Credit, provide for the benefit of Y either a substitute Letter of Credit that is issued by an Issuer with a qualifying Credit Rating acceptable to Y, or other Eligible Credit Support, in each case within one (1) Local Business Day after such refusal.
- (b) Upon the occurrence of a Letter of Credit Default, X agrees to either cause another Issuer to deliver to Y a substitute Letter of Credit, or, alternatively, X shall provide other Eligible Credit Support, in each case on or before the second Local Business Day after the occurrence thereof (or on or before the fifth Local Business Day after the occurrence thereof if only clause (i) under the definition of Letter of Credit Default applies). "Letter of Credit Default" shall mean with respect to an outstanding Letter of Credit, the occurrence of any of the following events: (i) the Issuer of such Letter of Credit shall fail to maintain a Credit Rating of at least "A" by S&P and "A2" by Moody's; (ii) the Issuer of the Letter of Credit shall fail to comply with or perform its obligations under such Letter of Credit if such failure shall be continuing after the lapse of any applicable grace period; (iii) the Issuer of such Letter of Credit shall disaffirm, disclaim, repudiate or reject, in whole or in part, or challenge the validity of, such Letter of Credit; (iv) such Letter of Credit shall expire or terminate, or shall fail or cease to be in full force and effect at any time during the term of this Agreement; or (v) any event analogous to an event specified in Section 5(a)(vii) of this Agreement shall occur with respect to the Issuer of such Letter of Credit; provided, however, that no Letter of Credit Default shall occur in any event with respect to a Letter of Credit after the time such Letter of Credit is required to be canceled or returned to the Issuer in accordance with the terms of this Agreement.
- (c) As one method of providing additional Posted Credit Support, X may cause the Issuer to increase the face amount of an outstanding Letter of Credit or provide one or more additional Letters of Credit.
- (d) (i) In the event that twenty (20) or fewer Local Business Days remain prior to the expiration of any outstanding Letter of Credit and X has failed to either extend such Letter of Credit or provide other Eligible Credit Support to Y, in each case as required by this Annex, Y may draw the entire undrawn portion of any outstanding Letter of Credit upon presentation to the Issuer of one or more certificates in accordance with the specific requirements of any such Letter of Credit. Cash received from drawing upon the Letter

of Credit shall be deemed Posted Collateral and shall either be (y) applied against all amounts that are due and owing from X but have not been paid to Y under this Agreement or (z) held by Y as Posted Collateral in accordance with this Annex. Notwithstanding Y's receipt of Cash from any drawing under a Letter of Credit, X shall remain obligated to Y to Transfer sufficient Eligible Credit Support to Y in accordance with the terms of this Annex. In addition, X shall remain obligated to Y for any amounts owing to Y and remaining unpaid after the application of any amounts so drawn by Y.

(ii) Upon or at any time after either (y) the occurrence of an Event of Default with respect to X or (y) the occurrence or deemed occurrence of an Early Termination Date as a result of a Termination Event or an Event of Default with respect to X and the failure of X to make all payments due and owing to Y in accordance with the terms of this Agreement, Y may, subject to the availability of such amounts for drawing, draw on any outstanding Letter of Credit in an amount equal to such amounts owing to it upon presentation to the Issuer of one or more certificates in accordance with the specific requirements of any such Letter of Credit. Notwithstanding Y's receipt of Cash from any drawing under a Letter of Credit, X shall remain obligated to Y to Transfer sufficient Eligible Credit Support to Y in accordance with the terms of this Annex. In addition, X shall remain obligated to Y for any amounts owing to Y and remaining unpaid after the application of any amounts so drawn by Y.

- (e) Either a party, or its Credit Support Provider (other than an Issuer), or both, may satisfy such party's obligations under Paragraph 3(a) hereof through the Transfer of one or more Letters of Credit to the other party as Other Posted Support.
- (f) The provisions of this Exhibit A are incorporated for all purposes into this Agreement and this Annex, including, but not limited to, Section 5(a)(iii) of this Agreement.

SCHEDULE 1
IRREVOCABLE TRANSFERABLE STANDBY LETTER OF CREDIT FORMAT
DATE OF ISSUANCE:

[Address]

Re: Credit No.

We hereby establish our Irrevocable Transferable Standby Letter of Credit in your favor for the account of _____ (the "Account Party"), for the aggregate amount not exceeding United States Dollars (\$), available to you at sight upon demand at our counters at (Location) on or before the expiration hereof against presentation to us of one or more of the following statements, dated and signed by your representative:

1. "This Letter of Credit No. [] will expire in twenty (20) or fewer Local Business Days, and beneficiary has not received an extension of said Letter of Credit or other acceptable replacement collateral in accordance with the terms of the [name of Contract(s)] dated as of _____ between Account Party and beneficiary. Wherefore, beneficiary hereby demands payment of the entire undrawn amount available under Letter of Credit No. []"; or
2. "An Event of Default (as defined in the [name of Contract(s)] dated as of _____ between Account Party and beneficiary, as the same may have been amended (the "Master Agreement")) has occurred with respect to Account Party under the Master Agreement, and Account Party's payment to beneficiary of \$[amount] is due and owing and Account Party has failed to make such payment in accordance with the terms of the Master Agreement. Wherefore, Beneficiary hereby demands payment of the above referenced amount under Letter of Credit No. []"; or
3. "An Early Termination Date (as defined in the [name of Contract(s)] dated as of _____ between Account Party and beneficiary, as the same may have been amended (the "Master Agreement")) has occurred or been designated with respect to the Account Party and the Account Party has failed to make all payments due and owing to Beneficiary in accordance with the terms of the Master Agreement, and Account Party's payment to beneficiary of \$[amount] is due and owing. Wherefore, beneficiary hereby demands payment of the above referenced amount under Letter of Credit No. []."

The amount which may be drawn by you under this Letter of Credit shall be automatically reduced by the amount of any drawings previously paid by us hereunder. Partial drawings are permitted hereunder.

This Letter of Credit shall expire on _____.

We have independently and without reliance upon you, and based on such information as we deemed appropriate, made our own analysis and decision to issue, and will make our own decision to re-issue or renew this Letter of Credit. We acknowledge that you have not made any representations to us in regard to this Letter of Credit, the Account Party, its affiliates or said underlying transactions.

We hereby agree with you that drafts drawn under and in compliance with the terms of this Letter of Credit shall be duly honored upon presentation as specified. [With respect to

Article 14(b) of the UCP, the Issuing Bank shall have a reasonable amount of time, not to exceed three (3) banking days following the date of its receipt of documents from the beneficiary, to examine the documents and determine whether to take up or refuse the documents and to inform the beneficiary hereof accordingly.]¹

[This Letter of Credit shall be governed by the Uniform Customs and Practice for Documentary Credits, 2007 Revision, International Chamber of Commerce Publication No. 600 (the "UCP"), as amended and restated from time to time, and as to matters not covered therein, be governed by the laws of the State of New York (without reference to its choice of law doctrine), including, without limitation, the Uniform Commercial Code as in effect in such state, except to the extent that the terms hereof are inconsistent with the provisions of the UCP, in which case the terms of this Letter of Credit shall govern.]²

[In the event of an Act of God, riot, civil commotion, insurrection, war or any other cause beyond our control that interrupts our business (collectively, an "Interruption Event") and causes the place for presentation of this Letter of Credit to be closed for business on the last day for presentation, the expiry date of this Letter of Credit will be automatically extended without amendment to a date thirty (30) calendar days after the place for presentation reopens for business.]³

[This Letter of Credit shall be governed by the INTERNATIONAL STANDBY PRACTICES 1998, INTERNATIONAL CHAMBER OF COMMERCE PUBLICATION NO. 590 ("ISP98"), as amended and restated from time to time, and as to matters not covered therein, be governed by the laws of the State of New York (without reference to its choice of law doctrine), including, without limitation, the Uniform Commercial Code as in effect in such state, except to the extent that the terms hereof are inconsistent with the provisions of the ISP98, in which case the terms of this Letter of Credit shall govern.]⁴

This Letter of Credit is transferable, and we hereby consent to such transfer, but otherwise may not be amended, changed or modified without the express written consent of the beneficiary hereof, the Issuing Bank and the Account Party.

Typographical errors other than in amounts are not considered discrepancies.

[BANK SIGNATURE]

¹ If governed by the ISP bracketed language is deleted.

² If governed by the ISP bracketed language is deleted.

³ If governed by the ISP bracketed language is deleted.

⁴ If Issuing Bank is JPMorgan Chase Bank, N.A. and Beneficiary is J.P. Morgan Ventures Energy Corporation, then LC must be governed by the ISP and not the UCP.

GUARANTEE

This GUARANTEE, dated effective as of March 28, 2012 (*this "Guarantee"*), made by JPMORGAN CHASE & CO., a Delaware corporation and multi-bank financial holding company headquartered in New York, New York (*"Guarantor"*),

WITNESSETH:

WHEREAS, Guarantor's wholly owned subsidiary J.P. Morgan Ventures Energy Corporation (*"Obligor"*), has entered into an ISDA Master Agreement dated March 28, 2012 (*the "Transactions"*) which Transactions have been memorialized in an agreement duly executed by Obligor (*the "Transaction Documents"*), with City of Long Beach, California (*the "Beneficiary"*); and

WHEREAS, the Guarantor derives substantial direct and indirect benefits from the entry by Obligor into Transactions with Beneficiary; and

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Guarantor hereby agrees as follows:

- (1) **Guarantee.** Guarantor, subject to the terms hereof, absolutely and unconditionally guarantees to Beneficiary up to an aggregate amount not exceeding \$100,000,000 the timely and complete payment as and when due, whether by acceleration or otherwise, of all obligations and liabilities, whether now in existence or hereafter arising, of Obligor to Beneficiary under and strictly in accordance with the Transactions and the Transaction Documents (*such obligations and liabilities, the "Obligations"*). If Obligor fails to pay any Obligation as and when due, Guarantor shall, promptly upon receiving written notice of such failure from Beneficiary or its agent, pay such Obligation to Beneficiary strictly in accordance with all terms and provisions of the Transactions and all applicable Transaction Documents (including, without limitation, place of payment), as if such payment were made by Obligor provided, however, that the Guarantor shall not have any liability to make any payment, respecting any Obligation if the Obligor is unable to make payment of the Obligation due to (i) an act of war, insurrection or civil strife; or (ii) an action by the government, or any instrumentality thereof, (whether de jure or de facto) in the country in which the Obligor is located or the Obligation is to be performed.
- (2) **Guarantee of Payment, not Collection.** This Guarantee is a guarantee of payment and not of collection. Beneficiary shall not be required to exhaust any right or remedy or to take any action against Obligor or any other person or entity or any collateral as a condition to payment by Guarantor hereunder.
- (3) **Guarantee Irrevocable; Scope.** This Guarantee is a continuing guarantee of all Obligations now or hereafter existing, and shall remain in full force and effect until it terminates in accordance with Section 8 hereof. Notwithstanding anything to the contrary contained herein, this Guarantee shall not apply if, and to the extent that, Guarantor and Beneficiary have so agreed in writing.

(4) **Nature of Guarantee.** Guarantor's liability hereunder is irrespective of:

- (a) any change in the amount, time, manner or place of payment of, or in any other term of, any Obligation, or any other amendment or waiver of or any consent to departure from any terms of any Obligation;
- (b) any release or amendment or waiver of, or consent to departure from, any other guarantee or support document, or any exchange, release or non-perfection of any collateral, for any Obligation;
- (c) the absence of any action to enforce any Obligation or any collateral therefor;
- (d) the rendering of any judgment against Obligor or any action to enforce the same;
- (e) any bankruptcy or insolvency of Obligor or any proceeding relating thereto; and
- (f) any lack or limitation of status or of corporate power of Obligor, or any incapacity or disability of any signatory for Obligor, or of any other guarantor or obligor in respect of any Obligation, or any change whatsoever in the objects, capital structure, or business of Obligor;

provided, however, that except as expressly set forth herein, (i) under no circumstances will Guarantor be liable at any time or place to Beneficiary for any amount of any payment that Obligor is excused from making under the terms of the Transaction Documents, for so long as Obligor shall be excused under such terms or for any amount in excess of the amount actually due and owing by Obligor to Beneficiary at such time and place and (ii) any and all defenses available to a guarantor under applicable law are reserved by Guarantor and any defenses, set-offs and counterclaims of Obligor shall be available to Guarantor to the same extent as such defenses, set-offs or counterclaims are available to Obligor and may be asserted by Guarantor in respect of its obligations hereunder, in each case whether or not asserted by Obligor.

- (5) **Formalities.** Guarantor hereby waives diligence, presentment, demand of payment (except as provided in paragraph (1)), any right to require a proceeding against Obligor, protest or notice with respect to the Obligations and all demands whatsoever, and covenants that this Guarantee shall not be discharged except in accordance with Section 8 hereof. The grant of time or other indulgence to Obligor shall in no manner release Guarantor from any of its obligations hereunder.
- (6) **Reinstatement.** This Guarantee shall continue to be effective or be reinstated, as the case may be, if at any time any payment of any Obligation is rescinded or must otherwise be returned by Beneficiary upon the insolvency, bankruptcy or reorganization of Obligor or otherwise, all as though the payment had not been made.
- (7) **Subrogation.** Guarantor shall be subrogated to all rights of Beneficiary against Obligor in respect of any amounts paid by Guarantor hereunder; *provided* that Guarantor shall not be entitled to enforce or to receive any payments arising out of, or based upon, such right of subrogation until the Obligations to Beneficiary shall have been finally and irrevocably paid in full.
- (8) **Expiration.** Unless earlier renewed in writing by Guarantor, all obligations of the Guarantor under his Guarantee shall terminate at 3:00 pm New York Time on the fifth anniversary of the

date hereof. Furthermore, Guarantor may terminate this Guarantee with respect to such Beneficiary at any time upon twenty (20) calendar days' prior written notice to such individual Beneficiary, which notice shall be provided to Beneficiary in accordance with the applicable Transaction Documents. (*the "Termination Date"*), it being expressly agreed that (a) such termination shall not limit or terminate this Guarantee in respect of any Payment Demands by Beneficiary under this Guarantee that are properly delivered to the Guarantor on or before such Termination Date; or (b) prevent reinstatement of this Guarantee with respect to any such Obligations in accordance with Section 6 hereof.

(9) Representations/Warranties. Guarantor represents and warrants to Beneficiary that, as of the date hereof:

- (a)** It is a corporation duly organized, validly existing and in good standing under the law of the State of Delaware;
- (b)** It has the full power and authority to execute and deliver this Guarantee and to perform its obligations hereunder; it has taken all necessary action to authorize such execution, delivery and performance; this Guarantee has been duly executed and delivered by Guarantor; and the execution, delivery and performance of this Guarantee by the Guarantor does not contravene or constitute a default under any statute, regulation or rule of any applicable governmental authority or under any provision of the Guarantor's certificate of incorporation or by-laws or any contractual restriction binding on the Guarantor;
- (c)** This Guarantee constitutes a legal, valid and binding obligation of Guarantor, enforceable against Guarantor in accordance with its terms, except as such enforceability may be limited by bankruptcy, insolvency, receivership or other similar laws affecting the rights of creditors generally, or by general principles of equity; and
- (d)** No authorization, approval or consent of, and no filing or registration with, any governmental authority is necessary for the execution, delivery or performance by Guarantor of this Guarantee or for the validity or enforceability hereof.

(10) Notices. Any notice or communication required or permitted to be made under this Guarantee shall be made in the same manner and with the same effect, unless otherwise specifically provided herein, as set forth in the Transaction Documents applicable to Beneficiary. All notices and communications to Guarantor with respect to this Guarantee, until Beneficiary is notified to the contrary in writing, shall be sent to Guarantor at:

JPMorgan Chase & Co.
270 Park Avenue,
New York, New York 10017-2070
Attn: Treasury Department, Regulatory and Guarantee Group- Peter W. Smith
Phone: 212-270-5815
Facsimile: 212-270-0819

All notices and communications to the Beneficiary with respect to this Guarantee, until the Guarantor is notified to the contrary in writing, shall be sent to the Beneficiary at:

City of Long Beach
Attention: Director, Gas and Oil Department
2400 E. Spring Street, Long Beach, CA 90806
Facsimile: 562-570-2008
Telephone: 562-570-2001

- (11) **Captions.** The headings and captions in this Guarantee are for convenience only and shall not affect the interpretation or construction of this Guarantee.
- (12) **Not Insured.** This Guarantee is not insured by the Federal Deposit Insurance Corporation of the United States of America.
- (13) **Integration.** This Guarantee shall supersede any prior or contemporaneous representations, statements, agreements or guarantees, oral or written, made by or between the Guarantor and a Beneficiary with regard to the Transaction.
- (14) **GOVERNING LAW.** THIS GUARANTEE AND ALL MATTERS ARISING OUT OF OR RELATING TO THIS GUARANTEE SHALL BE GOVERNED BY, AND THIS GUARANTEE SHALL BE CONSTRUED IN ACCORDANCE WITH, THE LAWS OF THE STATE OF NEW YORK, UNITED STATES OF AMERICA, WITHOUT GIVING EFFECT TO CHOICE OF LAW PRINCIPLES THAT WOULD DIRECT THE APPLICATION OF THE SUBSTANTIVE LAW OF ANY OTHER JURISDICTION. GUARANTOR AGREES TO THE EXCLUSIVE JURISDICTION OF THE STATE AND FEDERAL COURTS LOCATED IN THE STATE OF NEW YORK, UNITED STATES OF AMERICA, OVER ANY DISPUTES ARISING UNDER OR RELATING TO THIS GUARANTEE. BENEFICIARY HEREOF, BY ACCEPTING THIS GUARANTEE, AGREES THAT IT WILL NOT BRING ANY CLAIM OR CAUSE OF ACTION AGAINST GUARANTOR UNDER OR RELATING TO THIS GUARANTEE, OF ANY KIND OR DESCRIPTION (WHETHER IN LAW, EQUITY, CONTRACT OR TORT), OR FOR RECOGNITION OR ENFORCEMENT OF ANY JUDGMENT UNDER THIS GUARANTEE, IN ANY FORUM OTHER THAN THE SUPREME COURT, NEW YORK, NEW YORK COUNTY, BOROUGH OF MANHATTAN, OR, TO THE EXTENT PERMITTED BY LAW, IN FEDERAL COURT LOCATED IN THE BOROUGH OF MANHATTAN, CITY OF NEW YORK, STATE OF NEW YORK.
- (15) **Waiver of Jury Trial.** GUARANTOR AND, BY ITS ACCEPTANCE HEREOF, BENEFICIARY, EACH HEREBY IRREVOCABLY WAIVES TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY RIGHT THAT EACH MAY HAVE TO A TRIAL BY JURY IN RESPECT OF ANY SUIT, ACTION, PROCEEDING OR COUNTERCLAIM (WHETHER BASED ON CONTRACT, TORT OR OTHERWISE) ARISING OUT OF OR RELATING TO THIS GUARANTEE OR THE NEGOTIATION, ADMINISTRATION OR ENFORCEMENT THEREOF.

IN WITNESS WHEREOF, Guarantor has caused this Guarantee to be executed in its name and on its behalf by its duly authorized officer as of the date first above written.

JPMORGAN CHASE & CO.

By: _____

Name: Peter W. Smith

Title: Managing Director

ACKNOWLEDGED AND ACCEPTED
AS OF THE DATE ABOVE WRITTEN

CITY OF LONG BEACH, CALIFORNIA

NAME: _____

Assistant City Manager

TITLE: _____

City Manager

EXECUTED PURSUANT
TO SECTION 301 OF
THE CITY CHARTER.

APPROVED AS TO FORM

4.5 20 12
ROBERT E. SHANNON, City Attorney

By _____

RICHARD ANTHONY
DEPUTY CITY ATTORNEY

J.P.Morgan

J.P. Morgan
Energy Legal Department
277 Park Avenue – 13th Floor
New York, NY 10172-0003

John Johnson
Vice President
Phone: (212) 648-0281

March 28, 2012

City of Long Beach
Attention: Director, Gas and Oil Department
2400 E. Spring Street, Long Beach, CA 90806

RE: ISDA dated March 28, 2012 (“ISDA”) between J.P. Morgan Ventures Energy Corporation (“JPMVEC”) and City of Long Beach, California (the “Company”)

Dear :

Please find enclosed the documents listed below:

1. (2) Partially executed original of the referenced agreement;
2. JPMVEC IRS form W-9;
3. JPMVEC Incumbency Certificate;
4. JPMVEC Certificate of Incorporation and bylaws;
5. JPMVEC Board Resolutions;

To be delivered: **JPMorgan Chase & Co. (“JPM&C”) Guarantee dated 3/28/12;**

If the documents meet with your approval, please have an authorized officer of the Company execute the ISDA and send the following back to my attention at the address above:

1. Fully executed ISDA;
2. Incumbency Certificate for the officer signing on behalf of the Company;
3. Board Resolutions; and
4. IRS form W-9.

If you should have any questions, please contact me at (212) 648-2081.

Sincerely,



John Johnson

enclosures

J.P.Morgan

SECRETARY'S CERTIFICATE

I, Christine N. Bannerman, do hereby certify that I am a duly qualified Authorized Person of J.P. Morgan Ventures Energy Corporation, a corporation duly organized and existing under the laws of the State of Delaware (the "Corporation"), and that set forth below is a true and correct copy of resolutions duly adopted by the Directors of the Corporation pursuant to a unanimous written consent dated as of the 1st day of July 2010. I further certify that said resolutions, at the date hereof, are still in full force and effect.

RESOLVED, that any officer having a title of Vice President or higher (or its functional equivalent) is authorized and empowered to negotiate and execute any and all instruments, agreements and contracts on behalf of the Corporation, including, but not limited to indentures, mortgages, deeds, releases, conveyances, assignments, transfers, certificates, powers of attorney, declarations, leases, discharges, satisfactions, settlements, petitions, schedules, accounts, checks, affidavits, bonds, undertakings, guarantees, proxies, requisitions, demands, proofs of debt, claims, records, notes signifying indebtedness of the Corporation.

RESOLVED, that Senior Vice President shall be a title equivalent to Managing Director with the same duties, authority and power as a Managing Director and that Executive Director shall be a title equivalent to Vice President with the same duties, authority and power as a Vice President.

I further certify that John C. Johnson is a Vice President of the Corporation with specimen signature as follows and is empowered to act in conformity with the above resolutions.



WITNESS my hand and the seal of J.P. Morgan Ventures Energy Corporation on 8th day of March 2012.


Christine N. Bannerman

Request for Taxpayer Identification Number and Certification

Give Form to the
 requester. Do not
 send to the IRS.

Print or type See Specific Instructions on page 2.	Name (as shown on your income tax return) J.P. Morgan Ventures Energy Corporation	
	Business name/disregarded entity name, if different from above	
	Check appropriate box for federal tax classification (required): <input type="checkbox"/> Individual/sole proprietor <input checked="" type="checkbox"/> C Corporation <input type="checkbox"/> S Corporation <input type="checkbox"/> Partnership <input type="checkbox"/> Trust/estate <input type="checkbox"/> Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=partnership) ▶ _____ <input type="checkbox"/> Other (see instructions) ▶ _____	
	<input type="checkbox"/> Exempt payee	
	Address (number, street, and apt. or suite no.) 383 Madison Ave., 10th Floor	Requester's name and address (optional)
City, state, and ZIP code New York, New York 10017		
List account number(s) here (optional)		

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). However, for a resident alien, sole proprietor, or disregarded entity, see the Part I instructions on page 3. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN* on page 3.

Note. If the account is in more than one name, see the chart on page 4 for guidelines on whose number to enter.

Social security number									
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%; height: 20px;"></td> <td style="width: 25%;"></td> <td style="width: 25%;"></td> <td style="width: 25%;"></td> </tr> </table>					<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%; height: 20px;"></td> <td style="width: 25%;"></td> <td style="width: 25%;"></td> <td style="width: 25%;"></td> </tr> </table>				
Employer identification number									

Part II Certification

Under penalties of perjury, I certify that:

- 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
- 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
- I am a U.S. citizen or other U.S. person (defined below).

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. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions on page 4.

Sign Here	Signature of U.S. person ▶	Date ▶ 3/6/12
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General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Purpose of Form

A person who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) to report, for example, income paid to you, real estate transactions, mortgage interest you paid, acquisition or abandonment of secured property, cancellation of debt, or contributions you made to an IRA.

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN to the person requesting it (the requester) and, when applicable, to:

- Certify that the TIN you are giving is correct (or you are waiting for a number to be issued),
- Certify that you are not subject to backup withholding, or
- Claim exemption from backup withholding if you are a U.S. exempt payee. If applicable, you are also certifying that as a U.S. person, your allocable share of any partnership income from a U.S. trade or business is not subject to the withholding tax on foreign partners' share of effectively connected income.

Note. If a requester gives you a form other than Form W-9 to request your TIN, you must use the requester's form if it is substantially similar to this Form W-9.

Definition of a U.S. person. For federal tax purposes, you are considered a U.S. person if you are:

- An individual who is a U.S. citizen or U.S. resident alien,
- A partnership, corporation, company, or association created or organized in the United States or under the laws of the United States,
- An estate (other than a foreign estate), or
- A domestic trust (as defined in Regulations section 301.7701-7).

Special rules for partnerships. Partnerships that conduct a trade or business in the United States are generally required to pay a withholding tax on any foreign partners' share of income from such business. Further, in certain cases where a Form W-9 has not been received, a partnership is required to presume that a partner is a foreign person, and pay the withholding tax. Therefore, if you are a U.S. person that is a partner in a partnership conducting a trade or business in the United States, provide Form W-9 to the partnership to establish your U.S. status and avoid withholding on your share of partnership income.


J.P. MORGAN VENTURES ENERGY CORPORATION

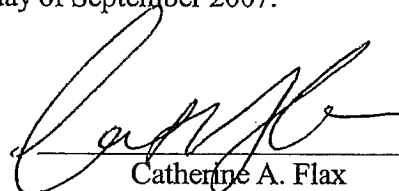
**UNANIMOUS WRITTEN CONSENT OF THE
BOARD OF DIRECTORS IN LIEU OF A MEETING**

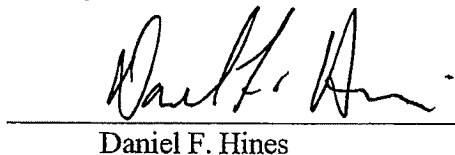
The undersigned, being all of the directors of J.P. Morgan Ventures Energy Corporation, a Delaware corporation (the "Corporation"), hereby consent in writing to this action in lieu of a meeting, pursuant to Section 141(f) of the Delaware General Corporation Law, and direct that this written consent be filed with the minutes of the proceedings of the Corporation.

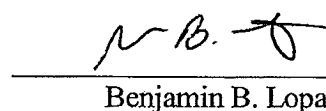
RESOLVED, that the Corporation is hereby authorized and empowered, and the officers of the Company are hereby authorized and empowered, for and in the name and on behalf of the Corporation, to enter into transactions relating to emissions and emission allowances, coal, crude oil and products refined therefrom, electricity and products and services related thereto (including, without limitation, energy, capacity, ancillary services and products, and renewable energy credits), natural gas, natural gas liquids, and freight, including without limitation physically settled and financially settled derivative transactions with respect thereto (including, without limitation, swaps, options and forward transactions)(*such types of transactions including without limitation purchases, sales, exchanges, storage, transportation and transmission and options thereon*) and to execute and deliver contracts, agreements and certificates in connection therewith in such form and on such terms as the officer executing the same shall approve, such approval to be conclusively evidenced by such execution.

IN WITNESS WHEREOF, the undersigned have signed this Consent in counterparts and have caused this action to become effective as of the 12th day of September 2007.


John Frederick Anderson


Catherine A. Flax


Daniel F. Hines


Benjamin B. Lopata

J.P.Morgan

J.P. Morgan Ventures Energy Corporation
383 Madison Avenue
New York, NY 10179

Mark Lenczowski
Secretary
Tel: (212) 648-0285
Fax: (646) 534-6390

Certificate of

J.P. Morgan Ventures Energy Corporation

I, Mark Lenczowski, Secretary of J.P. Morgan Ventures Energy Corporation, a corporation organized and existing under the laws of the State of Delaware (the "Corporation"), do hereby certify that attached hereto are true and correct copies of the following documents:

1. the By-Laws of the Corporation;
2. the Certificate of Incorporation of the Corporation filed with the Secretary of State of the State of Delaware on November 22, 1994; and
3. the Resolutions of the Board of Directors of the Corporation passed by unanimous written consent and effective as of September 12, 2007.

I further certify that the aforesaid documents, at the date hereof, are still in full force and effect:

WITNESS my hand as of the 4th day of May, 2010



Mark Lenczowski
Secretary

BY-LAWS

OF

J.P. Morgan Ventures Energy Corporation

Dated as of

March 12, 2009

J.P. Morgan Ventures Energy Corporation

* * * * *

BY-LAWS

* * * * *

ARTICLE I

OFFICES

Section 1. The registered office shall be in the City of Wilmington, County of New Castle, State of Delaware.

Section 2. The corporation may also have offices at such other places both within and without the State of Delaware as the board of directors may from time to time determine or the business of the corporation may require.

ARTICLE II

MEETINGS OF STOCKHOLDERS

Section 1. All meetings of the stockholders for the election of directors shall be held in the City of Wilmington, State of Delaware, at such place as may be fixed from time to time by the board of directors, or at such other place either within or without the State of Delaware as shall be designated from time to time by the board of directors and stated in the notice of the meeting. Meetings of stockholders for any other purpose may be held at such time and place, within or without the State of Delaware, as shall be stated in the notice of the meeting or in a duly executed waiver of notice thereof.

The board of directors may, in its sole discretion, determine that the meeting shall not be held at any place, but may instead be held solely by means of remote communication as authorized by Section 211(a)(2) of the General Corporation Law of Delaware. If so authorized, and subject to such guidelines and procedures as the board of directors may adopt, stockholders and proxyholders not physically present at a meeting of stockholders may, by means of remote communication, participate in a meeting of stockholders and be deemed present in person and vote at a meeting of stockholders whether such meeting is to be held at a designated place or solely by means of remote communication, provided that (i) the corporation shall implement reasonable measures to verify that each person deemed present and permitted to vote at the meeting by means of remote communication is a stockholder or proxyholder, (ii) the corporation shall implement reasonable measures to provide such stockholders and proxyholders a reasonable opportunity to participate in the meeting and to vote on matters submitted to

the stockholders, including an opportunity to read or hear the proceedings of the meeting substantially concurrently with such proceedings, and (iii) if any stockholder or proxyholder votes or takes other action at the meeting by means of remote communication, a record of such vote or other action shall be maintained by the corporation.

Section 2. Annual meetings of stockholders, commencing with the year 2008 shall be held on such date and time as shall be designated from time to time by the board of directors and stated in the notice of the meeting, at which they shall elect by a plurality vote a board of directors, and transact such other business as may properly be brought before the meeting.

Section 3. Written notice of the annual meeting stating the place if any, date and hour of the meeting, and the means of remote communication, if any, by which stockholders and proxyholders may be deemed to be present in person and vote at such meeting, shall be given to each stockholder entitled to vote at such meeting not less than ten nor more than thirty days before the date of the meeting.

Section 4. The officer who has charge of the stock ledger of the corporation shall prepare and make, at least ten days before every meeting of stockholders, a complete list of the stockholders entitled to vote at the meeting, arranged in alphabetical order, and showing the address of each stockholder and the number of shares registered in the name of each stockholder. Such list shall be open to the examination of any stockholder, for any purpose germane to the meeting for a period of at least ten days prior to the meeting: (i) on a reasonably accessible electronic network, provided that the information required to gain access to such list is provided with the notice of the meeting, or (ii) during ordinary business hours, at the principal place of business of the corporation. In the event that the corporation determines to make the list available on an electronic network, the corporation may take reasonable steps to ensure that such information is available only to stockholders of the corporation. If the meeting is to be held at a place, then the list shall be produced and kept at the time and place of the meeting during the whole time thereof, and may be inspected by any stockholder who is present. If the meeting is to be held solely by means of remote communication, then the list shall also be open to the examination of any stockholder during the whole time of the meeting on a reasonably accessible electronic network, and the information required to access such list shall be provided with the notice of the meeting.

Section 5. Special meetings of the stockholders, for any purpose or purposes, unless otherwise prescribed by statute or by the certificate of incorporation, may be called by the president and shall be called by the president or secretary at the request in writing of a majority of the board of directors, or at the request in writing of stockholders owning a majority in amount of the entire capital stock of the corporation issued and outstanding and entitled to vote. Such request shall state the purpose or purposes of the proposed meeting.

Section 6. Written notice of a special meeting stating the place if any, date and hour of the meeting, and the means of remote communication, if any, by which stockholders and proxyholders may be deemed to be present in person and vote at such

meeting, and the purpose or purposes for which the meeting is called, shall be given not less than one nor more than thirty days before the date of the meeting, to each stockholder entitled to vote at such meeting.

Section 7. Business transacted at any special meeting of stockholders shall be limited to the purposes stated in the notice.

Section 8. The holders of fifty percent (50%) of the stock issued and outstanding and entitled to vote thereat, present in person or represented by proxy, shall constitute a quorum at all meetings of the stockholders for the transaction of business except as otherwise provided by statute or by the certificate of incorporation. If, however, such quorum shall not be present or represented at any meeting of the stockholders, the stockholders entitled to vote thereat, present in person or represented by proxy, shall have power to adjourn the meeting from time to time, without notice other than announcement at the meeting, until a quorum shall be present or represented. At such adjourned meeting at which a quorum shall be present or represented any business may be transacted which might have been transacted at the meeting as originally notified. If the adjournment is for more than thirty days, or if after the adjournment a new record date is fixed for the adjourned meeting, a notice of the adjourned meeting shall be given to each stockholder of record entitled to vote at the meeting.

Section 9. When a quorum is present at any meeting, the vote of the holders of a majority of the stock having voting power present in person or represented by proxy shall decide any question brought before such meeting, unless the question is one upon which by express provision of the statutes or of the certificate of incorporation, a different vote is required in which case such express provision shall govern and control the decision of such question.

Section 10. Unless otherwise provided in the certificate of incorporation, each stockholder shall at every meeting of the stockholders be entitled to one vote in person or by proxy for each share of the capital stock having voting power held by such stockholder, but no proxy shall be voted on after three years from its date, unless the proxy provides for a longer period.

Section 11. Unless otherwise provided in the certificate of incorporation, any action required to be taken at any annual or special meeting of stockholders of the corporation, or any action which may be taken at any annual or special meeting of such stockholders, may be taken without a meeting, without prior notice and without a vote, if a consent in writing, setting forth the action so taken, shall be signed by the holders of outstanding stock having not less than the minimum number of votes that would be necessary to authorize or take such action at a meeting at which all shares entitled to vote thereon were present and voted. Prompt notice of the taking of the corporate action without a meeting by less than unanimous written consent shall be given to those stockholders who have not consented in writing. Stockholders may, unless the certificate of incorporation otherwise provides, act by written consent to elect directors; provided, however, that if such consent is less than unanimous, such action by written consent may be in lieu of holding an annual meeting only if all of the directorships to which directors

could be elected at an annual meeting held at the effective time of such action are vacant and are filled by such action.

A telegram, cablegram or other electronic transmission consenting to an action to be taken and transmitted by a stockholder or proxyholder, or by a person or persons authorized to act for a stockholder or proxyholder, shall be deemed to be written, signed and dated for the purposes herein, provided that any such telegram, cablegram or other electronic transmission sets forth or is delivered with information from which the corporation can determine (A) that the telegram, cablegram or other electronic transmission was transmitted by the stockholder or proxyholder or by a person or persons authorized to act for the stockholder or proxyholder and (B) the date on which such stockholder or proxyholder or authorized persons or persons transmitted such telegram, cablegram or other electronic transmission. The date on which such telegram, cablegram or electronic transmission is transmitted shall be deemed to be the date on which such consent was signed. No consent given by telegram, cablegram or electronic transmission shall be deemed to have been delivered until such consent is reproduced in paper form and until such paper form shall be delivered in accordance with Section 228 of the General Corporation Law of Delaware, to the corporation by delivery to its registered office in Delaware, its principal place of business or an officer or agent of the corporation having custody of the book in which proceedings of meetings of stockholders are recorded. Any copy, facsimile or other reliable reproduction of a consent in writing may be substituted or used in lieu of the original writing for any and all such purposes for which the original writing could be used, provided that such copy, facsimile or other reproduction shall be a complete reproduction of the entire original writing.

ARTICLE III

DIRECTORS

Section 1. The number of directors which shall constitute the whole board shall be not less than one nor more than ten. Commencing upon adoption of these amended and restated by-laws, the board shall consist of four (4) director(s). Thereafter, within the limits specified above, the number of directors shall be fixed by resolution of the board of directors or by the stockholders. The directors shall be elected at the annual meeting of the stockholders, except as provided in Section 2 of this Article, and each director elected shall hold office until his successor is elected and qualified. Directors need not be stockholders.

Section 2. Vacancies and newly created directorships resulting from any increase in the authorized number of directors may be filled by a majority of the directors then in office, though less than a quorum, or by a sole remaining director, and the directors so chosen shall hold office until the next annual election and until their successors are duly elected and shall qualify, unless sooner displaced. If there are no directors in office, then an election of directors may be held in the manner provided by statute. If, at the time of filling any vacancy or any newly created directorship, the directors then in office shall constitute less than a majority of the whole board (as constituted immediately prior to any such increase), the Court of Chancery may, upon application of any stockholder or stockholders holding at least ten percent of the total number of the shares at the time

outstanding having the right to vote for such directors, summarily order an election to be held to fill any such vacancies or newly created directorships, or to replace the directors chosen by the directors then in office.

Section 3. The business of the corporation shall be managed by or under the direction of its board of directors which may exercise all such powers of the corporation and do all such lawful acts and things as are not by statute or by the certificate of incorporation or by these amended and restated by-laws directed or required to be exercised or done by the stockholders.

MEETINGS OF THE BOARD OF DIRECTORS

Section 4. The board of directors of the corporation may hold meetings, both regular and special, either within or without the State of Delaware.

Section 5. The first meeting of each newly elected board of directors shall be held at such time and place as shall be fixed by the vote of the stockholders at the annual meeting and no notice of such meeting shall be necessary to the newly elected directors in order legally to constitute the meeting, provided a quorum shall be present. In the event of the failure of the stockholders to fix the time or place of such first meeting of the newly elected board of directors, or in the event such meeting is not held at the time and place so fixed by the stockholders, the meeting may be held at such time and place as shall be specified in a notice given as hereinafter provided for special meetings of the board of directors, or as shall be specified in a written waiver signed by all of the directors.

Section 6. Regular meetings of the board of directors may be held without notice at such time and at such place as shall from time to time be determined by the board.

Section 7. Special meetings of the board may be called by the president on two (2) days' notice to each director, either personally, by mail, by facsimile communication or any other electronic communication method; special meetings shall be called by the president or secretary in like manner and on like notice on the written request of two directors unless the board consists of only one director; in which case special meetings shall be called by the president or secretary in like manner and on like notice on the written request of the sole director.

Section 8. At all meetings of the board, a majority of directors shall constitute a quorum for the transaction of business and the act of a majority of the directors present at any meeting at which there is a quorum shall be the act of the board of directors, except as may be otherwise specifically provided by statute or by the certificate of incorporation. If a quorum shall not be present at any meeting of the board of directors, the directors present thereat may adjourn the meeting from time to time, without notice other than announcement at the meeting, until a quorum shall be present.

Section 9. Unless otherwise restricted by the certificate of incorporation or these amended and restated by-laws, any action required or permitted to be taken at any meeting of the board of directors or of any committee thereof may be taken without a

meeting, if all members of the board or committee, as the case may be, consent thereto in writing or electronic transmission, and the writing or writings or electronic transmission or transmissions are filed with the minutes of proceedings of the board or committee. Such filing shall be in paper form if the minutes are maintained in paper form and shall be in electronic form if the minutes are maintained in electronic form.

Section 10. Unless otherwise restricted by the certificate of incorporation or these amended and restated by-laws, members of the board of directors, or any committee designated by the board of directors, may participate in a meeting of the board of directors, or any committee, by means of conference telephone or other communications equipment by means of which all persons participating in the meeting can hear each other, and such participation in a meeting shall constitute presence in person at the meeting.

COMMITTEES OF DIRECTORS

Section 11. The board of directors may designate one or more committees, each committee to consist of one or more of the directors of the corporation. The board may designate one or more directors as alternate members of any committee, who may replace any absent or disqualified member at any meeting of the committee. In the absence or disqualification of a member of a committee, the member or members thereof present at any meeting and not disqualified from voting, whether or not the member or members constitute a quorum, may unanimously appoint another member of the board of directors to act at the meeting in the place of any such absent or disqualified member.

Any such committee, to the extent provided in the resolution of the board of directors, shall have and may exercise all the powers and authority of the board of directors in the management of the business and affairs of the corporation, and may authorize the seal of the corporation to be affixed to all papers which may require it; but no such committee shall have the power or authority in reference to the following matters: (i) approving or adopting, or recommending to the stockholders, any action or matter expressly required by the General Corporation Law of Delaware to be submitted to stockholders for approval or (ii) adopting, amending or repealing any by-law of the corporation. Such committee or committees shall have such name or names as may be determined from time to time by resolution adopted by the board of directors.

Section 12. Each committee shall keep regular minutes of its meetings and report the same to the board of directors when required.

Section 13. Unless otherwise provided in the certificate of incorporation, the bylaws or the resolution of the board of directors designating the committee, a committee may create one or more subcommittees, each subcommittee to consist of one or more members of the committee, and delegate to a subcommittee any or all of the powers and authority of the committee.

COMPENSATION OF DIRECTORS

Section 14. Unless otherwise restricted by the certificate of incorporation or these amended and restated by-laws, the board of directors shall have the authority to fix the compensation of directors. The directors may be paid their expenses, if any, of attendance at each meeting of the board of directors and may be paid a fixed sum for attendance at each meeting of the board of directors or a stated salary as director. No such payment shall preclude any director from serving the corporation in any other capacity and receiving compensation therefore. Members of special or standing committees may be allowed like compensation for attending committee meetings.

REMOVAL OF DIRECTORS

Section 15. Unless otherwise restricted by the certificate of incorporation or by law, any director or the entire board of directors may be removed, with or without cause, by the holders of a majority of shares entitled to vote at an election of directors.

ARTICLE IV

NOTICES

Section 1. Whenever, under the provisions of the statutes or of the certificate of incorporation or of these amended and restated by-laws, notice is required to be given to any director or stockholder, it shall not be construed to mean personal notice, but such notice may be given in writing, by mail, addressed to such director or stockholder, at his address as it appears on the records of the corporation, with postage thereon prepaid, and such notice shall be deemed to be given at the time when the same shall be deposited in the United States mail. Notice to directors may also be given by facsimile telecommunication, by facsimile communication or any other electronic communication method in accordance with and subject to the provisions of Section 232 of the General Corporation Law of Delaware.

Section 2. Whenever any notice is required to be given under the provisions of the statutes or of the certificate of incorporation or of these amended and restated by-laws, a waiver thereof in writing, signed by the person or persons entitled to notice or a waiver by electronic transmission by the person entitled to notice, whether before or after the time stated therein, shall be deemed equivalent thereto.

ARTICLE V

OFFICERS

Section 1. The officers of the corporation shall be chosen by the board of directors and shall at a minimum consist of a chief executive officer, a president, a vice president, a secretary and a treasurer. The board of directors may also choose additional vice presidents, and one or more assistant secretaries and assistant treasurers or other officers with officer titles not included in these bylaws. Any number of offices may be held by the same person, unless the certificate of incorporation or these amended and restated by-laws otherwise provide.

Section 2. The board of directors at its first meeting after each annual meeting of stockholders shall choose a president, one or more vice presidents, a secretary and a treasurer. Any number of offices may be held by the same person, unless the certificate of incorporation or these amended and restated by-laws otherwise provide.

Section 3. The board of directors may appoint such other officers and agents as it shall deem necessary who shall hold their offices for such terms and shall exercise such powers and perform such duties as shall be determined from time to time by the board.

Section 4. The salaries of all officers and agents of the corporation shall be fixed by the board of directors, the President or the head of the human resources department that oversees the compensation of the employees of this corporation.

Section 5. The officers of the corporation shall hold office until their successors are chosen and qualify. Any officer elected or appointed by the board of directors may be removed at any time by the affirmative vote of a majority of the board of directors. Any vacancy occurring in any office of the corporation shall be filled by the board of directors.

PRESIDENT

Section 6. The president, shall preside at all meetings of the stockholders and the board of directors, shall have general authority over and active management responsibility for the business of the corporation and shall see that all orders and resolutions of the board of directors are carried into effect.

The president shall be responsible for the management, supervision and direction over the business and affairs of the corporation, subject, however, to the direction and the control of the board. The president, in general, shall perform all duties incident to the office of the president and other such duties as from time to time may be assigned to him by the board or by the by-laws.

THE MANAGING DIRECTORS AND VICE PRESIDENTS

Section 7. The managing director(s) (if any) and vice-president(s) shall assist and perform such duties as prescribed by the president to ensure the general and active management of the business of the corporation. The managing directors and vice-presidents shall perform such other duties and have such other powers as the board of directors or the President may from time to time prescribe.

The board of directors, the president and the head of the human resources department that oversees the corporation's employment may establish various levels of vice presidents, including, but not limited to executive vice presidents, senior vice presidents, executive directors and vice presidents. Managing directors shall be the functional equivalent of senior vice presidents. The executive vice president, if any, or, if there shall be more than one, the executive vice presidents in the order determined by the board of directors or the president, shall, in the absence or disability of the president, perform the duties and exercise the powers of the president and shall perform such other duties and have such other powers as the board of directors may, from time to time, prescribe. The managing director or senior vice president, if any, or, if there shall be more than one, the managing directors and senior vice presidents in the order determined by the board of directors or the president, shall, in the absence or disability of the president and all executive vice presidents, perform the duties and exercise the powers of the president and shall perform such other duties and have such other powers as the board of directors may, from time to time, prescribe. The executive director, if any, or if there be more than then based on the order designated by the directors or the president (or in the absence of any such designation, then in the order of their election) shall, in the absence or disability of all executive vice presidents, managing directors and senior vice presidents, perform the duties and exercise the powers of the president and shall perform such other duties and have such other powers as the board of directors may, from time to time, prescribe. The vice president, if any, or if there be more than one vice president, the vice presidents in the order designated by the directors or the president (or in the absence of any such designation, then in the order of their election) shall, in the absence or disability of all executive vice presidents, managing directors, senior vice presidents and executive directors, perform the duties and exercise the powers of the president and shall perform such other duties and have such other powers as the board of directors may, from time to time, prescribe. When so acting, the executive vice presidents, managing directors, senior vice presidents, executive directors and vice presidents shall have all the powers of and be subject to all the restrictions upon the president.

THE VICE PRESIDENTS

Section 8. The vice-president(s) shall assist and perform such duties as prescribed by the president to ensure the general and active management of the business of the corporation. The vice-presidents shall perform such other duties and have such other powers as the board of directors or the President may from time to time prescribe.

THE TREASURER AND ASSISTANT TREASURERS

Section 11. The treasurer shall have the custody of the corporate funds and securities and shall keep full and accurate accounts of receipts and disbursements in books belonging to the corporation and shall deposit all moneys and other valuable effects in the name and to the credit of the corporation in such depositories as may be designated by the board of directors.

Section 12. The treasurer shall disburse the funds of the corporation as may be ordered by the board of directors, taking proper vouchers for such disbursements, and shall render to the president and the board of directors, at its regular meetings, or when the board of directors so requires, an account of all his or her transactions as treasurer and of the financial condition of the corporation.

Section 13. If required by the board of directors, the treasurer shall give the corporation a bond (which shall be renewed every six years) in such sum and with such surety or sureties as shall be satisfactory to the board of directors for the faithful performance of the duties of his or her office and for the restoration to the corporation, in case of his or her death, resignation, retirement or removal from office, of all books, papers, vouchers, money and other property of whatever kind in his or her possession or under his or her control belonging to the corporation.

Section 14. The assistant treasurer, or if there shall be more than one, the assistant treasurers in the order determined by the board of directors or the president (or if there be no such determination, then in the order of their election) shall, in the absence of the treasurer or in the event of his or her inability or refusal to act, perform the duties and exercise the powers of the treasurer and shall perform such other duties and have such other powers as the board of directors may from time to time prescribe.

GENERAL AUTHORITY OF THE OFFICERS, EMPLOYEES AND AGENTS

Section 15. Any officer having a title of vice president or higher (or its functional equivalent) is authorized and empowered to negotiate and execute any and all instruments, agreements and contracts on behalf of the corporation, including, but not limited to indentures, mortgages, deeds, releases, conveyances, assignments, transfers, certificates, declarations, leases, discharges, satisfactions, settlements, petitions, schedules, accounts, affidavits, bonds, undertakings, guarantees, proxies, requisitions, demands, proofs of debt, claims, records, and notes signifying indebtedness of the corporation.

Section 16. Any officer having a title of senior vice president or higher (or its functional equivalent) is authorized and empowered to execute powers of attorney to other individuals to act in conformity with the preceding section.

ARTICLE VI

CERTIFICATES FOR SHARES

Section 1. The shares of the corporation shall be represented by a certificate or shall be uncertificated. Certificates shall be signed by, or in the name of the corporation by, the chairman or vice-chairman of the board of directors, or the president or a vice president, and by the treasurer or an assistant treasurer, or the secretary or an assistant secretary of the corporation.

If the corporation shall be authorized to issue more than one class of stock or more than one series of any class, the powers, designations, preferences and relative, participating, optional or other special rights of each class of stock or series thereof and the qualifications, limitations or restrictions of such preferences and/or rights shall be set forth in full or summarized on the face or back of the certificate which the corporation shall issue to represent such class or series of stock, provided that, except as otherwise provided in section 202 of the General Corporation Law of Delaware, in lieu of the foregoing requirements, there may be set forth on the face or back of the certificate which the corporation shall issue to represent such class or series of stock, a statement that the corporation will furnish without charge to each stockholder who so requests the powers, designations, preferences and relative, participating, optional or other special rights of each class of stock or series thereof and the qualifications, limitations or restrictions of such preferences and/or rights.

Within a reasonable time after the issuance or transfer of uncertificated stock, the corporation shall send to the registered owner thereof a written notice containing the information required to be set forth or stated on certificates pursuant to Sections 151, 156, 202(a) or 218(a) of the General Corporation Law of Delaware or a statement that the corporation will furnish without charge to each stockholder who so requests the powers, designations, preferences and relative participating, optional or other special rights of each class of stock or series thereof and the qualifications, limitations or restrictions of such preferences and/or rights.

Section 2. Any of or all the signatures on a certificate may be facsimile. In case any officer, transfer agent or registrar who has signed or whose facsimile signature has been placed upon a certificate shall have ceased to be such officer, transfer agent or registrar before such certificate is issued, it may be issued by the corporation with the same effect as if he were such officer, transfer agent or registrar at the date of issue.

LOST CERTIFICATES

Section 3. The board of directors may direct a new certificate or certificates or uncertificated shares to be issued in place of any certificate or certificates theretofore issued by the corporation alleged to have been lost, stolen or destroyed, upon the making

of an affidavit of that fact by the person claiming the certificate of stock to be lost, stolen or destroyed. When authorizing such issue of a new certificate or certificates or uncertificated shares, the board of directors may, in its discretion and as a condition precedent to the issuance thereof, require the owner of such lost, stolen or destroyed certificate or certificates, or his legal representative, to advertise the same in such manner as it shall require and/or to give the corporation a bond in such sum as it may direct as indemnity against any claim that may be made against the corporation with respect to the certificate alleged to have been lost, stolen or destroyed.

TRANSFER OF STOCK

Section 4. Upon surrender to the corporation or the transfer agent of the corporation of a certificate for shares duly endorsed or accompanied by proper evidence of succession, assignation or authority to transfer, it shall be the duty of the corporation to issue a new certificate to the person entitled thereto, cancel the old certificate and record the transaction upon its books. Upon receipt of proper transfer instructions from the registered owner of uncertificated shares, such uncertificated shares shall be cancelled and issuance of new equivalent uncertificated shares or certificated shares shall be made to the person entitled thereto and the transaction shall be recorded upon the books of the corporation.

FIXING RECORD DATE

Section 5. In order that the corporation may determine the stockholders entitled to notice of or to vote at any meeting of stockholders or any adjournment thereof, or to express consent to corporate action in writing without a meeting, or entitled to receive payment of any dividend or other distribution or allotment of any rights, or entitled to exercise any rights in respect of any change, conversion or exchange of stock or for the purpose of any other lawful action, the board of directors may fix, in advance, a record date, which shall not be more than sixty nor less than ten days before the date of such meeting, nor more than sixty days prior to any other action. A determination of stockholders of record entitled to notice of or to vote at a meeting of stockholders shall apply to any adjournment of the meeting: provided, however, that the board of directors may fix a new record date for the adjourned meeting.

REGISTERED STOCKHOLDERS

Section 6. The corporation shall be entitled to recognize the exclusive right of a person registered on its books as the owner of shares to receive dividends, and to vote as such owner, and to hold liable for calls and assessments a person registered on its books as the owner of shares, and shall not be bound to recognize any equitable or other claim to or interest in such share or shares on the part of any other person, whether or not it shall have express or other notice thereof, except as otherwise provided by the laws of Delaware.

ARTICLE VII

GENERAL PROVISIONS

DIVIDENDS

Section 1. Dividends upon the capital stock of the corporation, subject to the provisions of the certificate of incorporation, if any, may be declared by the board of directors at any regular or special meeting, pursuant to law. Dividends may be paid in cash, in property, or in shares of the capital stock, subject to the provisions of the certificate of incorporation.

Section 2. Before payment of any dividend, there may be set aside out of any funds of the corporation available for dividends such sum or sums as the directors from time to time, in their absolute discretion, think proper as a reserve or reserves to meet contingencies, or for equalizing dividends, or for repairing or maintaining any property of the corporation, or for such other purpose as the directors shall think conducive to the interest of the corporation, and the directors may modify or abolish any such reserve in the manner in which it was created.

CHECKS

Section 3. All checks or demands for money and notes of the corporation shall be signed by such officer or officers or such other person or persons as the board of directors may from time to time designate.

FISCAL YEAR

Section 4. The fiscal year of the corporation shall be fixed as January 1st through December 31st.

SEAL

Section 5. The corporate seal shall have inscribed thereon the name of the corporation, the year of its organization and the words "Corporate Seal, Delaware." The seal may be used by causing it or a facsimile thereof to be impressed or affixed or reproduced or otherwise.

INDEMNIFICATION

Section 6. The corporation shall indemnify its officers, directors, employees and agents to the extent permitted by the General Corporation Law of Delaware.

ARTICLE VIII

AMENDMENTS

Section 1. These amended and restated by-laws may be altered, amended or repealed or new by-laws may be adopted by the stockholders or by the board of directors at any meeting.


J.P. MORGAN VENTURES ENERGY CORPORATION

Assistant Secretary's Certificate

I, Kathleen A. Juhase, the duly elected, acting and qualified Assistant Secretary of J.P. MORGAN VENTURES ENERGY CORPORATION, a Delaware corporation (the "Company"), DO HEREBY CERTIFY that annexed hereto as Exhibit A, is a true, correct and complete copy of the Certificate of Incorporation of the Company in effect as of the date hereof.

WITNESS my hand this 21st day of September, 2005.

[SEAL]


Assistant Secretary

State of Delaware
Office of the Secretary of State PAGE 1

I, EDWARD J. FREEL, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF INCORPORATION OF "J.P. MORGAN VENTURES ENERGY CORPORATION", FILED IN THIS OFFICE ON THE TWENTY-SECOND DAY OF NOVEMBER, A.D. 1994, AT 9 O'CLOCK A.M.

A CERTIFIED COPY OF THIS CERTIFICATE HAS BEEN FORWARDED TO THE KENT COUNTY RECORDER OF DEEDS FOR RECORDING.



Edward J. Freel

Edward J. Freel, Secretary of State

AUTHENTICATION:

DATE: 7312320

11-22-94

2455160 8100

944225854

CERTIFICATE OF INCORPORATION

OF

J.P. MORGAN VENTURES ENERGY CORPORATION

FIRST: The name of the corporation is J.P. Morgan Ventures Energy Corporation.

SECOND: The address of the corporation's registered office in the State of Delaware is 902 Market Street, 7th Floor, in the City of Wilmington, County of New Castle, Attention: Mr. James Berry. The corporation shall act as its own registered agent in charge thereof.

THIRD: The purpose of the corporation is to engage in any lawful act or activity for which corporations may be organized under Delaware General Corporation Law.

FOURTH: The total number of shares of stock which the corporation is authorized to issue is one thousand (1,000) shares of common stock, having a par value of one dollar (\$1.00) per share.

FIFTH: The business and affairs of the corporation shall be managed by or under the direction of the board of directors, and the directors need not be elected by ballot unless required by the by-laws of the corporation.

SIXTH: In furtherance and not in limitation of the powers conferred by the laws of the State of Delaware, the Board of Directors is expressly authorized to make, amend and repeal the by-laws.

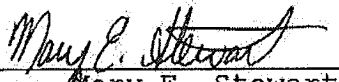
SEVENTH: A director of the corporation shall not be personally liable to the corporation or its stockholders for monetary damages for breach of fiduciary duty as a director, except for liability (i) for any breach of the director's duty of loyalty to the corporation or its stockholders, (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) under Section 174 of the Delaware General Corporation Law, or (iv) for any transaction from which the director derived an improper personal benefit. If the Delaware General Corporation Law is amended to authorize corporate action further eliminating or limiting the personal liability of directors, then the liability of a director of the corporation shall be eliminated or limited to the fullest extent permitted by the Delaware General Corporation Law, as so

amended. Any repeal or modification of this provision shall not adversely affect any right or protection of a director of the corporation existing at the time of such repeal or modification.

EIGHTH: The corporation reserves the right to amend, alter or repeal any provision contained in this Certificate of Incorporation in the manner from time to time prescribed by the laws of the State of Delaware. All rights herein conferred are granted subject to this reservation.

NINTH: The incorporator is Mary E. Stewart, whose mailing address is 60 Wall Street, 39th Floor, New York, New York 10260-0060.

I, THE UNDERSIGNED, being the incorporator, for the purpose of forming a corporation under the laws of the State of Delaware do make, file and record this Certificate of Incorporation, and, accordingly, have hereto set my hand this 21st day of November, 1994.



Mary E. Stewart

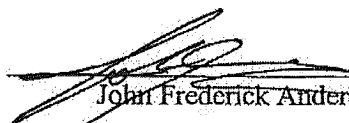
J.P. MORGAN VENTURES ENERGY CORPORATION

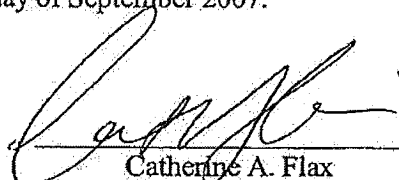
**UNANIMOUS WRITTEN CONSENT OF THE
BOARD OF DIRECTORS IN LIEU OF A MEETING**


The undersigned, being all of the directors of J.P. Morgan Ventures Energy Corporation, a Delaware corporation (the "Corporation"), hereby consent in writing to this action in lieu of a meeting, pursuant to Section 141(f) of the Delaware General Corporation Law, and direct that this written consent be filed with the minutes of the proceedings of the Corporation.


RESOLVED, that the Corporation is hereby authorized and empowered, and the officers of the Company are hereby authorized and empowered, for and in the name and on behalf of the Corporation, to enter into transactions relating to emissions and emission allowances, coal, crude oil and products refined therefrom, electricity and products and services related thereto (including, without limitation, energy, capacity, ancillary services and products, and renewable energy credits), natural gas, natural gas liquids, and freight, including without limitation physically settled and financially settled derivative transactions with respect thereto (including, without limitation, swaps, options and forward transactions)(*such types of transactions including without limitation purchases, sales, exchanges, storage, transportation and transmission and options thereon*) and to execute and deliver contracts, agreements and certificates in connection therewith in such form and on such terms as the officer executing the same shall approve, such approval to be conclusively evidenced by such execution.

IN WITNESS WHEREOF, the undersigned have signed this Consent in counterparts and have caused this action to become effective as of the 12th day of September 2007.


John Frederick Anderson


Catherine A. Flax


Daniel F. Hines


Benjamin B. Lopata



OFFICE OF THE CITY ATTORNEY
Long Beach, California

ROBERT E. SHANNON
City Attorney

HEATHER A. MAHOOD
Chief Assistant City Attorney

MICHAEL J. MAIS
Assistant City Attorney

PRINCIPAL DEPUTIES

Dominic Hotzhaus
Anne C. Laffont
Monte H. Machit
J. Charles Parker

DEPUTIES

C. Geoffrey Athol
Gary J. Anderson
Richard F. Anthony
Amy R. Burton
Kenba L. Carney
Christina L. Chovel
Charles M. Gale
Barbara J. McFigure
Barry M. Meyers
Cristyl Meyers
Brendan D. Russell
Tiffany L. Shin
Linda Traug
Theodore B. Zanger

April 4, 2012

J. P. Morgan Ventures Energy Corporation
270 Park Avenue, 40th Floor
New York, NY 10017-2070

Ladies and Gentlemen:

We have acted as counsel to the City of Long Beach (the "Counterparty"), a municipal corporation, in connection with its execution and delivery of the ISDA Master Agreement, dated as of March 28, 2012, 2012, including the Schedule (the "Schedule") and the Credit Support Annex (the "Credit Support Annex") thereto (together with any Confirmation (as defined below) collectively, the "ISDA Agreements"), between the Counterparty and J. P. Morgan Ventures Energy Corporation ("JPMorgan"). Except as otherwise defined herein, capitalized terms used herein have the meanings given to them in the ISDA Agreement.

In rendering the opinions expressed herein, we have examined the ISDA Agreements. In addition, we have examined such certificates of the Counterparty, such copies certified or otherwise identified to our satisfaction of documents and records of the Counterparty, such certificates, instruments, and other written communications of other public officials, and such other records, certificates, instruments, agreements and documents, in each case as we have deemed relevant and appropriate as the basis for the opinions expressed herein. As to matters of fact relevant to the opinions expressed herein, and as to factual matters arising in connection with the foregoing examinations, we have relied, to the extent we have deemed appropriate, upon the findings, representations, and warranties contained in the ISDA Agreements, certificates of corporate officers of the Counterparty, and certificates and other communications of public officials, without further investigation by us as to the facts set forth therein.

In making such examination and in such reliance, we have assumed (i) the genuineness and authenticity of all signatures in all such records, certificates, instruments, agreements, and documents, (ii) the legal capacity of each natural person identified in each of those records, certificates, instruments, agreements, and documents, and (iii) the authenticity and completeness of all documents, certificates, agreements, instruments, and records submitted to us as originals and the conformity to authentic original documents, certificates, agreements, instruments, and records of all copies submitted to us as copies.

Based upon the foregoing, and in reliance thereon, and having due regard for such legal considerations as we have deemed relevant, and subject in all respects to the assumptions, qualifications, limitations, comments, and exceptions set forth herein, we are of the opinion that:

1. The Counterparty has the requisite legal power and authority to execute and deliver the ISDA Agreements and to perform its obligations under the ISDA Agreements and has duly authorized such execution, delivery, and performance.

2. Approval of the execution and delivery of the ISDA Agreement by the Counterparty does not, and the Counterparty may comply with the ISDA Agreements in a manner which will not, violate any statutory law or regulation applicable to it or any provision of its charter or any other indenture, ordinance or agreement known to us to which the Counterparty is a party or by which it is bound.

3. No authorizations of, or exemptions, actions or approvals by, or notices to, or filings with, any governmental authority is required to be obtained or made by the Counterparty under any statutory law or regulation applicable to it as a condition to approval of, or the execution and delivery by, the Counterparty of the ISDA Agreements, or to the performance by the Counterparty of its obligations thereunder, except such as have been obtained, given or made.

4. To our knowledge, there is no action or proceeding against the Counterparty, pending or overtly threatened in writing, before any court, government agency, or arbitrator which, by the terms of any pleadings or demand letter provided to us by the Counterparty, seeks to prohibit the enforceability of the ISDA Agreements against the Counterparty.

5. The obligations of the Counterparty under the ISDA Agreements will be secured by a lien on and pledge of any Cash delivered by the Counterparty to JP Morgan pursuant to the terms of the Credit Support Annex and in the manner and to the extent provided in the Credit Support Annex. The Counterparty is duly authorized to pledge such Cash, and when such Cash is pledged to JP Morgan, the lien of such pledge is valid and binding, and once such Cash is delivered to JP Morgan, no further action on the part of the Counterparty or any other party is required to perfect the same or the interest of JPMorgan therein.

The opinions expressed herein are further subject to the following assumptions, qualifications, limitations, comments, and exceptions:

The opinions expressed herein are expressly limited to the internal substantive laws (including statutory laws and regulations) of the State of California and applicable federal statutory laws and regulations of the United States of America. In respect to such laws, in addition to other limitations set forth herein, such reference is limited to laws which are normally and customarily applicable to the Counterparty in relation to the transactions provided for in the ISDA Agreements. References herein to "laws" of a jurisdiction are to the laws of that jurisdiction, other than the statutes and ordinances, the administrative decisions, and the rules and regulations of counties, towns, municipalities, and special political subdivisions other than the Counterparty (whether created or enabled through legislative action at the federal, state, or regional level), and judicial decisions to the extent that they deal with any of the foregoing.


The opinions expressed herein are for the sole benefit of and may only be relied upon by JPMorgan and, without our prior written consent, may not be relied upon in any

manner by any other person or entity. This opinion may not be furnished to any other person or entity without our prior written consent, except that this opinion may be provided (i) to the independent auditors and attorneys of JPMorgan, (ii) to any state or federal authority having regulatory jurisdiction over JPMorgan, (iii) pursuant to an order or legal process of any court or governmental agency, and (iv) to any permitted successor to JPMorgan under the terms of the ISDA Agreements. The opinions expressed herein are as of the date of this opinion letter, and we make no undertaking to supplement such opinions if, after the date of this letter, facts or circumstances come to our attention or changes in the law occur which could affect such opinions.

Very truly yours,

ROBERT E. SHANNON, City Attorney

By:


RICHARD F. ANTHONY
Deputy City Attorney