COOPERATION AGREEMENT

This Cooperation Agreement (the "Agreement") is entered into as of April ____, 2012 ("Execution Date") by and between Pacific Gas and Electric Company ("PG&E") and Calpine Corporation ("Calpine") (each a "Party" and collectively the "Parties"), whose authorized representatives have executed this Agreement.

RECITALS

- A. This Agreement is in furtherance of the purposes of Resolution E-4471 (the "Resolution") of the California Public Utilities Commission ("CPUC"), which directs, among other things, PG&E, Southern California Edison, and San Diego Gas & Electric to enter into contract negotiations with Calpine on the Sutter Energy Center ("Sutter").
- B. The Parties intend to enter into an agreement for the purchase and sale of resource adequacy from Sutter in furtherance of the purposes of the Resolution ("RA Confirmation").
- C. In addition to the RA Confirmation, another purpose of the Resolution is to enable further analysis of the impacts of current and proposed dynamic transfer tariff changes at the California Independent System Operator ("CAISO").
- D. The CAISO determined that Sutter is needed for operation flexibility in 2017 and beyond in a high load scenario, but the CAISO tariff does not yet identify the precise characteristics of "flexible" resources needed for renewable integration. An intensive stakeholder process reviewing the need for CAISO tariff modifications is ongoing that would provide the market mechanism for procuring specific types of flexible resources ("Flexible Resource Process"). Pseudo-ties and dynamic transfers are one way that may provide additional flexibility and/or lower costs by accessing resources located outside of the CAISO's transmission footprint.
- E. The Parties see mutual benefit in establishing a cooperative relationship for Calpine to actively participate and actively develop modifications to the CAISO tariff with respect to pseudo-ties and dynamic transfers, in the Flexible Resource Process with the CAISO and stakeholders and PG&E finds that it is in the best interest of its ratepayers to encourage Calpine to participate and develop modifications to the CAISO tariff, in the Flexible Resource Process.

NOW THEREFORE, for good and valuable consideration, including the mutual covenants set forth herein, the Parties enter into this Agreement, on the terms and conditions set forth herein

ARTICLE 1 COOPERATIVE EFFORTS

1.1 <u>Purposes</u>. In addition to the purposes recited above or elsewhere in this Agreement, the purposes of this Agreement include the following: (a) to establish a cooperative working relationship between the Parties; (b) to provide certain benefits to

the ratepayers; and (c) to set forth Calpine's commitments for the timely delivery of services and actions in connection with this Agreement. The Parties further agree that the recitals set forth above constitute an integral part of this Agreement and are incorporated herein by this reference with the same force and effect as if set forth herein as agreements of the Parties.

- 1.2 <u>Flexible Resource Process.</u> During the Term, Calpine shall provide all appropriate services and actions with respect to Sutter to actively participate and develop modifications to the CAISO tariff with respect to pseudo-ties and dynamic transfers, in the Flexible Resource Process with the CAISO and stakeholders. These services and actions shall include, but are not limited, to the following:
- 1.2.1 Calpine continuing the pseudo-tie agreement between Calpine and the CAISO as it provides the CAISO with valuable data regarding dynamic transfers;
- 1.2.2 Calpine maintaining and continuing operations of Sutter as it is a facility with a pseudo-tie agreement which is beneficial to the CAISO and stakeholders understanding the role these types of agreements may play in California's and other states' energy futures;
- 1.2.3 Calpine testing and collecting information from Sutter on the Sutter's capability to provide the flexible capacity services sought by the CAISO for renewable integration, namely the capability to provide maximum ramping, load following and regulation via dynamic transfer over a pseudo-tie; and
- 1.2.4 Calpine providing such information described in Section 1.2.3 above to the CAISO and stakeholders along with any other information Calpine gathers or obtains concerning the impact of proposed tariff changes along with information on the strengths, weaknesses and capabilities of connecting to the grid through a pseudo-tie using the CAISO's dynamic transfer tariff.
- 1.3 <u>Additional Services and Actions</u>. In addition to the services and actions with respect to the Flexible Resource Process and in order for PG&E and its ratepayers to further benefit from such services and actions, during the Term, Calpine shall:
- 1.3.1 Prepare and file any applications, filings, and correspondence with any Governmental Body with respect to Sutter;
- 1.3.2 Attend and participate in, any meetings (including telephone conferences) with respect to the Flexible Resource Process, Governmental Approvals or with any Governmental Body;
- 1.3.3 Provide PG&E with (a) copies of filings and correspondence with respect to Section 1.3.1 and (b) notice of and, to the extent practicable under the circumstances, the ability to attend, and as appropriate, participate in any meetings (including telephone conferences with respect to the Governmental Approvals or Flexible Resource Process); and

- 1.3.4 Maintain the readiness of Sutter to the CAISO consistent with Operating Standard 22 of the CPUC's General Order 167, Operation and Maintenance Standards for Power Plants and the Resolution.
- 1.4 Further Assurances. During the Term, when requested to do so by PG&E, Calpine shall execute, acknowledge and deliver any and all such further instruments and documents as may reasonably be requested in order to complete performance of any and all obligations and acts herein described and to do any and all other acts in order to carry out the intents and purposes of this Agreement (with the understanding that the foregoing provisions of this Section 1.4 are not intended to, and shall not be construed in a manner that would, change or increase in any material respect the undertakings and obligations of Calpine hereto from those expressly set forth herein or reasonably inferable herein).

ARTICLE 2 TERM

- 2.1 <u>Term.</u> The "Term" shall mean the period of time commencing upon the Effective Date and continuing until the later of (a) the Payment Date or (b) the date the Parties' obligations under this Agreement have been fulfilled.
- 2.2 <u>Binding Nature</u>. This Agreement shall be effective and binding as of the date (the "Effective Date") this Agreement is approved by the CPUC pursuant to Resolution E-4471 of the CPUC which approval shall (i) include that PG&E's entry into this Agreement is reasonable and that payments to be made by PG&E hereunder are recoverable in rates and (ii) not contain conditions or modifications unacceptable to the Parties. If the Effective Date does not occur on or prior to May 21, 2012, then this Agreement shall be of no further force or effect and neither Party shall have any obligation or liability to the other.

ARTICLE 3 PAYMENT

- 3.1 <u>PG&E Contributions to Flexible Resource Process</u>. Provided the conditions precedent to such payment as set forth in Section 3.2 have been satisfied and Calpine has performed its obligations in Article 1, PG&E agrees that it shall, in consideration of the benefits to PG&E and its ratepayers and in furtherance of the objectives of this Agreement and the Resolution, pay Calpine [insert Dollars (\$_____)] ("Payment Amount") on or by [January 31, 2013] (the "Payment Date").
- 3.2 Conditions Precedent to PG&E's Obligation. PG&E's obligation to make the contribution described in this Article 3 shall be conditioned upon (1) Calpine's written withdraw of its notice with the CAISO stating their request for a Capacity Procurement Mechanism ("CPM") designation; and (2) CAISO's written withdraw of its waiver with the Federal Energy Regulatory Commission ("FERC") for the one requirement for the CPM that allows the CAISO to procure backstop capacity.

ARTICLE 4 DEFINITIONS

- 4.1 "AAA" shall have the meaning set forth in Section 5.14.2.
- 4.2 "Affiliate" means, with respect to any person or entity, any other person or entity (other than an individual) that (a) directly or indirectly, through one or more intermediaries, controls, or is controlled by such person or entity or (b) is under common control with such person or entity. For this purpose, "control" means the direct or indirect ownership of fifty percent (50%) or more of the outstanding capital stock or other equity interests having ordinary voting power.
 - 4.3 "Arbitration" shall have the meaning set forth in Section 5.14.2.
- 4.4 "Business Day" means any day except a Saturday, Sunday, or a Federal Reserve Bank holiday. A Business Day shall open at 8:00 a.m. and close at 5:00 p.m. local time for the relevant Party's principal place of business. The relevant Party, in each instance unless otherwise specified, shall be the Party from whom the notice, payment or delivery is being sent and by whom the notice or payment or delivery is to be received.
 - 4.5 "CAISO" shall have the meaning set forth in the Recitals.
- 4.6 "Claims" means all third party claims or actions, threatened or filed and, whether groundless, false, fraudulent or otherwise, that directly or indirectly relate to the subject matter of an indemnity, and the resulting losses, damages, expenses, attorneys' fees and court costs, whether incurred by settlement or otherwise, and whether such claims or actions are threatened or filed prior to or after the termination or expiration of this Agreement.
- 4.7 "Confidentiality Agreement" shall have the meaning set forth in Section 5.3.
 - 4.8 "CPM" shall have the meaning set forth in Section 3.2.
 - 4.9 "CPUC" shall have the meaning set forth in the Recitals.
 - 4.10 "Effective Date" shall have the meaning set forth in Section 2.2.
 - 4.11 "Execution Date" shall have the meaning set forth in the Recitals.
 - 4.12 "Executive(s)" hall have the meaning set forth in Section 5.14.1(a).
 - 4.13 "FERC" shall have the meaning set forth in Section 3.2.
- 4.14 "Flexible Resource Process" shall have the meaning set forth in the Recitals.

- 4.15 "Governmental Approvals" means all authorizations, consents, approvals, waivers, exceptions, variances, filings, permits, orders, licenses, exemptions and declarations of or with any governmental entity and shall include those operating permits and licenses, and any of the foregoing under any applicable environmental law, that are required for the use and operation of Sutter.
- 4.16 "Governmental Body" means any federal, state, local, municipal or other government; any governmental, regulatory or administrative agency, commission or other authority lawfully exercising or entitled to exercise any administrative, executive, judicial, legislative, police, regulatory or taxing authority or power; and any court or governmental tribunal.
- 4.17 "Initial Negotiation End Date" shall have the meaning set forth in Section 5.14.1(a).
 - 4.18 "Manager" shall have the meaning set forth in Section 5.14.1(a).
 - 4.19 "Payment Amount" shall have the meaning set forth in Section 3.1.
 - 4.20 "Payment Date" shall have the meaning set forth in Section 3.1.
 - 4.21 "Referral Date" shall have the meaning set forth in Section 5.14.1(a).
 - 4.22 "Resolution" shall have the meaning set forth in the Recitals.
 - 4.23 "Sutter" shall have the meaning set forth in the Recitals.
 - 4.24 "Term" shall have the meaning set forth in Section 2.1.

ARTICLE 5 MISCELLANEOUS

- 5.1 <u>Successors and Assigns.</u> This Agreement shall be binding upon the successors and assigns of the Parties.
- 5.2 <u>Partnership, Joint Venture and Principal-Agent</u>. Nothing herein creates or shall be deemed to create a partnership, joint venture, principal-agent relationship, or any other representative relationship of any type between any Party and the other Party.
- 5.3 <u>Confidentiality</u>. This Agreement and the terms and conditions herein shall be (a) considered "Confidential Information" as such term is defined in the Confidentiality Agreement by and between the Parties dated April 10, 2012 ("Confidentiality Agreement") and (b) subject to such Confidentiality Agreement.
- 5.4 <u>Limitation of Liability</u>. THE PARTIES AGREE AND ACKNOWLEDGE THAT THE OBLIGOR'S LIABILITY UNDER THIS AGREEMENT SHALL IN NO EVENT EXCEED THE PAYMENT AMOUNT AND SHALL BE LIMITED TO DIRECT ACTUAL DAMAGES ONLY, SUCH DIRECT ACTUAL DAMAGES WHICH SHALL NOT EXCEED THE PAYMENT AMOUNT SHALL BE THE SOLE AND EXCLUSIVE REMEDY AND

ALL OTHER REMEDIES OR DAMAGES AT LAW OR IN EQUITY ARE WAIVED. NEITHER PARTY SHALL BE LIABLE FOR CONSEQUENTIAL, INCIDENTAL, PUNITIVE, EXEMPLARY OR INDIRECT DAMAGES, LOST PROFITS OR OTHER BUSINESS INTERRUPTION DAMAGES, BY STATUTE, IN TORT OR CONTRACT, UNDER ANY INDEMNITY PROVISION OR OTHERWISE. SUBJECT TO THE PROVISIONS OF SECTION 5.5 (INDEMNITIES), IT IS THE INTENT OF THE PARTIES THAT THE LIMIATIONS HEREIN IMPOSED ON THE REMEDIES AND THE MEASURE OF DAMAGES BE WITHOUT REGARD TO THE CUASE OR CUASES RELATED THERETO, INCLUDING THE NEGLIGENCE OF ANY PARTY, WEHTER SUCH EGLIGENCE BE SOLE, JOINT OR CONCURRENT OR ACTIVE OR PASSIVE.

5.5 <u>Indemnity</u>.

- 5.5.1 <u>Indemnity by Calpine</u>. Calpine shall release, indemnify and hold harmless PG&E or PG&E's respective directors, officers, agents, and representatives against and from any and all loss, Claims, actions or suits, including costs and attorney's fees resulting from, or arising out of or in any way connected with (i) Calpine's operation and/or maintenance of Sutter, or (ii) Calpine's actions or inactions with respect to this Agreement, including, without limitation, any loss, Claim, action or suit, for or on account of injury to, bodily or otherwise, or death of persons, or for damage to or destruction of property belonging to PG&E, Calpine, or others, excepting only such loss, Claim, action or suit as may be caused solely by the willful misconduct or gross negligence of PG&E, its Affiliates, or PG&E's and Affiliates' respective agents, employees, directors, or officers.
- 5.5.2 <u>Indemnity by PG&E</u>. PG&E shall release, indemnify and hold harmless Calpine, its directors, officers, agents, and representatives against and from any and all loss, Claims, actions or suits, including costs and attorney's fees resulting from, or arising out of or in any way connected with the performance of this Agreement, excepting only such loss, Claim, action or suit as may be caused solely by the willful misconduct or gross negligence of Calpine, its Affiliates, or Calpine's and Affiliates' respective agents, employees, directors or officers.
- 5.6 <u>Method of Execution</u>. This Agreement may be executed in multiple counterparts, each of which shall be deemed an original, but all of which shall constitute one and the same instrument.
- 5.7 <u>Entire Agreement</u>. This Agreement and the Confidentiality Agreement constitute the entire understanding of the Parties with respect to the subject matter covered by the Agreement. This Agreement supersedes all prior agreements, discussions, negotiations and writings, oral or written, prior to the date of this Agreement with respect to the subject matter covered by the Agreement; provided that the Confidentiality Agreement shall constitute the understanding of the Parties with respect to Confidential Information.
- 5.8 <u>Notice</u>. All notices, reports and other communications with a Party shall be sent to the representative designated by the Party on said Party's signature page of this Agreement. Each Party shall have the right to change its representative upon written notice to the other Party.

- 5.9 <u>Amendments.</u> This Agreement may be amended only in a writing executed by each of the Parties.
- 5.10 <u>Assignment</u>. Neither Party shall assign this Agreement or its rights hereunder without the prior written consent of the other Party, which consent may be withheld in the exercise of its sole discretion.
- 5.11 <u>Severability</u>. If any provision of this Agreement is deemed invalid or unenforceable, the balance of this Agreement shall remain in full force and effect.
- 5.12 <u>Law</u>. This Agreement shall be interpreted under the substantive laws of the State of California, without giving effect to choice-of-law principles thereof.
- 5.13 No Obligation to Enter into Future Contracts. Entry into this Agreement shall not constitute an offer or acceptance or promise of any future contract or amendment of any existing contract. Each Party shall retain such rights with respect to its own information as it had prior to entering into this Agreement. This Agreement shall not obligate any Party or any of its affiliates to enter into any contract.
- 5.14 <u>Dispute Resolution</u>. Mindful of the high costs of litigation, not only in dollars but time and energy as well, the Parties intend to and do hereby establish a final and binding out-of-court dispute resolution procedure to be followed in the event any controversy should arise out of or concerning the performance of this Agreement. Accordingly, it is agreed as follows:

5.14.1 Negotiation.

- (a) The Parties will attempt in good faith to resolve any controversy or claim arising out of or relating to this Agreement by prompt negotiations between each Party's Contract Manager, as identified on the signature page hereof, or such other person designated in writing as a representative of the Party ("Manager"). Either Manager may request a meeting (in person or telephonically) to initiate negotiations to be held within ten (10) Business Days of the other Party's receipt such request, at a mutually agreed time and place. If the matter is not resolved within 15 Business Days of their first meeting ("Initial Negotiation End Date"), the Managers shall refer the matter to the designated senior officers of their respective companies, who shall have authority to settle the dispute ("Executive(s)"). Within five (5) Business Days of the Initial Negotiation End Date ("Referral Date"), each Party shall provide one another written notice confirming the referral and identifying the name and title of the Executive who will represent the Party.
- (b) Within 5 Business Days of the Referral Date the Executives shall establish a mutually acceptable location and date, which date shall not be greater than 30 calendar days from the Referral Date, to meet. After the initial meeting date, the Executives shall meet, as often as they reasonably deem necessary to exchange the relevant information and to attempt to resolve the dispute.

- (c) All communication and writing exchanged between the Parties in connection with these negotiations shall be confidential and shall not be used or referred to in any subsequent binding adjudicatory process between the Parties.
- (c) If the matter is not resolved within 45 calendar days of the Referral Date, or if the Party receiving the written request to meet, pursuant to subpart (a) above, refuses or will not meet within 10 Business Days, either Party may initiate mediation of the controversy or claim according to the terms of the following Section 5.14.2 below.
- 5.14.2 Mediation. If the dispute cannot be so resolved by negotiation as set forth in Section 5.14.1 above, it shall be resolved at the request of any Party through a two-step dispute resolution process administered by the American Arbitration Association ("AAA"). As the first step the Parties agree to mediate any controversy before a mediator from the AAA panel, pursuant to AAA's commercial mediation rules, in a mutually acceptable location. Either Party may begin mediation by serving a written demand for mediation. If within 60 days after service of a written demand for mediation, the mediation does not result in resolution of the dispute, then the controversy shall be settled by arbitration conducted by a retired judge or justice from the AAA panel, administered by and in accordance with AAA's Commercial Arbitration Rules ("Arbitration"). Any mediator(s) and arbitrator(s) shall have no affiliation with, financial or other interest in, or prior employment with either Party and shall be knowledgeable in the field. Either Party may initiate arbitration by filing with AAA a notice of intent to arbitrate within 60 days of service of the written demand for mediation.

5.14.3 Arbitration.

- (a) Each Party shall choose one arbitrator within twenty (20) Business Days of either Party's written election to the other to arbitrate, and within ten (10) Business Days after both such arbitrators are chosen, such arbitrators shall choose a third arbitrator who shall act as Chair. Any arbitrator chosen shall be a disinterested party with knowledge of the industry.
- (b) Any arbitration hereunder shall be conducted in the city of New York, NY, borough of Manhattan.
- (c) The arbitrators, once chosen, shall consider any transaction tapes or any other evidence which the arbitrators deem necessary, as presented by each Party. In deciding the award, the provisions of this Agreement will be binding on the arbitration panel. A majority vote of the arbitration panel shall govern. The arbitration panel will deliver its decision in writing within 30 days after the conclusion of the arbitration hearing. The arbitration panel shall specify the basis for its decision, the basis for the damages award and a breakdown of the damages awarded, and the basis of any other remedy. Except as provided in the Federal Arbitration Act, the decision of the arbitration panel will be binding on and non-appealable by the Parties. Each Party agrees that any arbitration award against it may be enforced in any court of competent

jurisdiction and that any Party may authorize any such court to enter judgment on the arbitration panel's decision

- (d) The arbitrator shall have no authority to award punitive or exemplary damages or any other damages other than direct and actual damages.
- (e) Any expenses incurred in connection with hiring the arbitrators and performing the arbitration shall be shared and paid equally between the Parties. Each Party shall bear and pay its own expenses incurred by each in connection with the arbitration, unless otherwise included in a solution chosen by the arbitration panel. In the event either Party must file a court action to enforce an arbitration award under this Article, the prevailing Party shall be entitled to recover its court costs and reasonable attorney fees.
- (f) In the event the Parties choose to litigate any matter hereunder, the Parties hereby waive the right to jury trial.
- (g) The existence, contents or results of any arbitration hereunder may not be disclosed without the prior written consent of both Parties.

SIGNATURE PAGE

IN WITNESS WHEREOF, the Parties hereto enter into this Cooperation

Agreement. Each person signing this Cooperation Agreement represents and warrants
that he or she has been duly authorized to enter into this Cooperation Agreement by the
company on whose behalf it is indicated that the person is signing.

Dated: April, 2012	Party: Pacific Gas and Electric Company
Ву:	
Roy Kuga, Vice President Ener	gy Supply

Designated Representative for Receipt of Notices and Other Communications:

Name: Roy Kuga

Address: 77 Beale Street, San Francisco, California 94105

Telephone Number: (415) 973-3806 Facsimile Number: (415) 973-1859

Electronic Mail Address: rmk4@pge.com

Contract Manager:

Name: Address:

Telephone Number: Facsimile Number:

Electronic Mail Address:

SIGNATURE PAGE

IN WITNESS WHEREOF, the Parties hereto enter into this Cooperation Agreement. Each person signing this Cooperation Agreement represents and warrants that he or she has been duly authorized to enter into this Cooperation Agreement by the company on whose behalf it is indicated that the person is signing.

Party: Calpine Corporation
Receipt of Notices and Other Communications:
•
e. 100
2282
608
nakler@calpine.com

Electronic Mail Address: