

MEMORANDUM OF UNDERSTANDING
GEYSERS AIR MONITORING PROGRAM

PHASE VI

July 2002
Revised July 2006

GAMP VI
Memorandum of Understanding

GAMP VI AGREEMENT

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AGREEMENT

I. CONSORTIUM NAME

This Memorandum of Understanding ("Agreement") is entered into and by the Regulatory and Industry Members of the Consortium ("Parties") listed in Appendix I. Appendices I through VI shall be part of this Agreement. Consortium Members include Regulatory, Industry, State, and Public Members. The Consortium shall be called "Geysers Air Monitoring Program Group, Phase VI", or "GAMP VI".

II. PURPOSE

GAMP VI shall gather meteorological data and ambient air concentration data for hydrogen sulfide and other air contaminants to show the long term air quality trends in The Geysers Known Geothermal Resource Area (KGRA) in a cost effective manner. GAMP VI shall fulfill ambient air monitoring compliance requirements that have been imposed on GAMP VI Industry Members by the GAMP VI Regulatory Members in Appendix I for those permitted facilities identified in Appendix I during the period that GAMP VI is in force. For future projects proposed by any GAMP VI participant, the regulatory agencies in Appendix I shall give major consideration to GAMP VI as an alternative to imposing other ambient air monitoring and meteorological data requirements.

III. EFFECTIVE DATE AND DURATION

A. EFFECTIVE DATE

This Agreement, and counterparts hereof, shall become effective July 1, 2006, for those Regulatory Members and Industry Members listed in Appendix I who have signed this Agreement by such date.

B. DURATION

The duration of this Agreement is determined by the term of funding set forth in Appendix III. Additional terms of funding may be approved to effectively extend the duration of this Agreement. The terms for such approval are set forth under the terms of Section III.C, "Extension of Agreement."

C. EXTENSION OF AGREEMENT

Additional terms of funding, and any desirable changes in annual program scope pertaining thereto, shall be made by modification to, and/or addition of, appropriate appendices in order to accommodate the extensions of this Agreement. The substance of such modifications and additions in annual program scope for any given fiscal year shall be determined and approved by the Steering Committee. The necessary funding extensions for such desirable changes must be approved, in writing, by all Industry Members that will be continuing parties under these extensions. Where specifically authorized by his or her Party, a Representative, or delegated alternate, as established in Section V. A "Organization" below, may provide the necessary written approval for such extensions. Said written approval must be obtained prior to the commencement

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of any new term of funding. Failure by an Industry Member to provide written approval by such date shall result in that Industry Member's loss of participation in any extension of this Agreement. The Industry Member may buy back into the extended Agreement as a new Member under the terms of Article XI, "Additional Participants."

IV. DESCRIPTION AND SCOPE OF PROGRAM

The Parties agree on the terms and conditions hereinafter stated to implement a program to monitor air quality in The Geysers KGRA, for the reasons stated in Article II above, according to the details described in Appendix II. If there is any conflict between the attachments and this Agreement, the language of this Agreement shall control.

V. ORGANIZATION

The Consortium shall be organized as follows:

A. REPRESENTATIVES

Each Party to this Agreement shall, by written notice to the Steering Committee Chairman (Section V.C. below), designate a Representative and one alternate to whom or upon whom any communications with respect to this Agreement may be given, delivered or served. The Representative designated shall act on behalf of his Party in all matters arising under this Agreement. During the absence or unavailability of a Representative, such Representative's duly designated alternate shall be empowered to act as the Representative of his Party.

B. STEERING COMMITTEE

The Steering Committee shall be comprised of representatives or alternates from each of the Consortium Members identified in Appendix I.

The duties of the Steering Committee may include, but are not limited to, the following:

1. The selection of one or more consultants (or other entities that may provide contractual services) ("the Contractor") to undertake and complete GAMP VI;
2. Reviewing the progress and performance of any consultant (or other entities that may provide contractual services) hired hereunder;
3. Approving annual budgets of expenditures hereunder;
4. Making, reviewing, and approving recommendations as may be necessary to further the purpose of this Agreement;
5. Revising the scope of GAMP VI, as long as the purpose as stated in Article II is not changed. This includes recommendations that increase or decrease the

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scope of monitoring conducted under GAMP VI. The Steering Committee shall ensure the following are considered in the review of recommendations prior to approval: purpose, basis, history of similar monitoring efforts, other sources of data, alternatives, methods, equipment, duration, and cost;

6. Preparing and approving contracts and/or agreements for use by the Contract Manager; and
7. To appoint a Contract Manager in the event of the incumbent's resignation.

Neither the Steering Committee, the Contract Manager, nor any other Party shall have authority, under any theory, to incur costs, expenses or obligations beyond those expressly authorized in this Agreement. This statement shall be included in all contracts and agreements.

The Steering Committee will conduct meetings at least quarterly. All actions by the Steering Committee shall be made (in meetings noticed at least ten (10) days in advance) by at least a majority vote of a quorum of its Members. A quorum shall consist of more than one half of the Steering Committee voting membership, and shall at a minimum require that at least one regulatory member and one industry member be present. Vote by proxy shall not be allowed. A vote by the Steering Committee quorum shall consist of a maximum of six (6) Industry votes (distributed to the Industry Members as listed in Appendix I), a maximum of six (6) Regulatory votes (2 each to the Regulatory Members listed in Appendix I), and a maximum of three (3) State and Public Member votes (1 each to those listed in Appendix I).

The California Energy Commission has no funding responsibility under this Agreement and shall not vote on matters related to finances.

The two (2) Lake County residents (Public Members) are not Parties to this Agreement and shall not have any financial responsibility under this Agreement and shall not vote on matters related to finances.

The Steering Committee will decide whether the Contractor may be present at a Steering Committee Meeting in discussions regarding contractor performance, finances, or technical information to clarify or explain data it is responsible for.

C. STEERING COMMITTEE CHAIRMAN

The Steering Committee Chairman shall be elected or removed by a majority vote of the Steering Committee. The Steering Committee Chairman shall act in a prudent manner, but shall not be liable for his actions to the Parties hereto. The Steering Committee Chairman shall:

1. Properly notice all Steering Committee meetings ten (10) days in advance;

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2. Prepare agendas for Steering Committee meetings; and,
3. Chair Steering Committee meetings.

D. CONTRACT MANAGER

The Contract Manager shall initially be an employee of the Northern Sonoma County Air Pollution Control District (NSCAPCD). The NSCAPCD shall perform the duties of Contract Manager as set forth in this section in lieu of a share of cost. The Contract Manager shall:

1. Sign contracts or other instruments in writing when authorized in writing by the Steering Committee;
2. Keep a record of all meetings of the Steering Committee;
3. Keep a current book containing the name and address of each Party to this Agreement, their Representative and alternates;
4. Serve all notices required by this Agreement;
5. Keep correct and complete accounts of all receipts and disbursements and deposit all moneys or other valuable effects in the name and to the credit of the Parties hereto in such depository bank, trust companies, savings and loan associations, or banks as may be designated by the Steering Committee;
6. At all quarterly meetings of the Steering Committee, or whenever required by five (5) or more Representatives, report accounts of all financial transactions hereunder;
7. Sign all checks, drafts, or orders for the payment of cost and expenses authorized in the annual budget approved by the Steering Committee;
8. Discharge all administrative duties delegated by the Steering Committee, or those that may be required by this Agreement;
9. Not be held liable for the accuracy of the data collected;
10. Manage all contracts or agreements entered into pursuant to this Agreement and furnish the Steering Committee with written reports relating to nonperformance by any Contractor;
11. Provide a status report of the Contractor's activities at all meetings of the Steering Committee;

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12. Inform the Steering Committee of any problems reported by the Consortium Members in writing to the Contract Manager;
13. Recalculate the cost allocation shares according to Appendix IV, if Parties join or withdraw from GAMP VI, or if Parties add to or permanently remove from service any of those facilities listed in Table IV-1, and provide such reallocations to the Steering Committee for formal approval;
14. Calculate amount due from each Party for each billing period, collect such amounts and pay Contractors;
15. Prepare draft annual budgets for review and approval by the Steering Committee; and
16. Obtain appropriate property insurance to protect the property of those Parties who are lending equipment for use in GAMP VI.

The Contract Manager shall act in a prudent manner, but shall not be liable for its actions to the Parties hereto. The Contract Manager may resign at any time by giving written notice thereof at least forty five (45) days in advance to the Steering Committee. The Party being removed or resigning as Contract Manager retains all other rights and obligations of this Agreement. Within thirty (30) days of receiving written notice, the Steering Committee shall select a new Contract Manager. The Contract Manager shall not simultaneously be a provider of services unless approved and agreed to by a two-thirds (2/3) vote of the Consortium Membership.

VI. COSTS AND ALLOCATION OF COSTS

A. COSTS

The fifth annual budget (Fiscal Year starting July 1, 2006) is included in Appendix III. For each subsequent fiscal year, an annual budget is to be approved by the Steering Committee prior to the start of that fiscal year. A contingency factor shall be no more than 10%, and a contingency factor of less than 10% may be used upon the approval of the Steering Committee. The contingency monies cannot be spent without a majority vote of the Industry Members of the Steering Committee.

B. ALLOCATION OF COSTS

The maximum, not to exceed total annual cost for each Industry member, is to be calculated by applying its Allocated Cost Share, as determined under the provisions provided in Appendix IV, to the approved annual budget, including any contingency account, for that Fiscal Year. No Party shall be liable for an amount in excess of its own Allocated Cost Share.

C. PAYMENT

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As defined in this subsection, Appropriate Parties shall mean Parties which are contributing monetary resources. See Appendices III and IV.

Billings for services or goods will be presented for payment to the Appropriate Parties by the Contract Manager on a yearly basis, or shorter period at the discretion of the Contract Manager. The Contract Manager shall base the periodic amount billed to Industry Members on the Allocation of Costs for the overall program costs as provided in Appendix IV.

D. REIMBURSEMENT OF STEERING COMMITTEE MEMBERS

The expense, including but not limited to salary, benefits, travel, or similar costs, of the Steering Committee Members shall be born by the Party sponsoring each Member and not charged to the Consortium. Any costs of Steering Committee Chairman shall not be charged to the Consortium.

E. PAYMENT OF CONTRACTOR

The Contractor shall be paid by the Contract Manger in accordance with the terms of the Contract for Consulting Services. Appendix III. Attachment 1, "Schedule 1 - Payments." is included herein as the fee schedule from which the initial annual budget is based.

F. RESERVES

Any moneys remaining from prior GAMP programs that are brought forward into GAMP VI are to be considered reserves. Any moneys that remain unexpended or unencumbered at the end of a fiscal year of GAMP VI are also considered to be reserves. These reserves may be used to fund a portion of a new fiscal year of GAMP VI as established in the cost allocation formula in Appendix IV or they may be used to offset costs such as equipment refurbishment, equipment replacement, funding other scope of work deemed necessary and approved by the Steering Committee, and program termination costs which are not shown as part of the maximum allowable cost of GAMP VI. Reserves may be used to increase the scope of GAMP VI without increasing the maximum allowable cost to Party Members. These moneys may also be used to fund unpaid share costs resulting from bankruptcy of a Consortium Member. Reserves can only be expended with a two thirds (2/3) majority vote of the Regulatory and Industry Members at a Steering Committee meeting.

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VII. ACCOUNTING RECORDS AND AUDITS

Any Party to this Agreement shall have the right to audit the books and records kept by the Contract Manager relating to the expenses and payments made hereunder. The Contract Manager shall maintain adequate books, receipts, and records for such purposes during the term of this Agreement, and for at least three (3) years after final payment under any contract pursuant to this Agreement, shall make such books, receipts, and records available to the Parties and the California Auditor General at all reasonable times until the end of such three (3) year period, and for so long thereafter as there may remain any unresolved questions or dispute regarding any item pertaining thereto.

VIII. DISCLOSURE OF DATA

H₂S/meteorological data are to be collected by the Contractor. The Contractor shall submit a monthly preliminary data report to the Contract Manager and the LCAQMD. The Contractor shall, as part of its weekly duties, review the hourly H₂S Strip Charts and report all hourly data above 15 ppb to the LCAQMD & NSCAPCD. Radon and PM-10 data are to be collected by the LCAQMD and provided to the Contractor in a timely fashion so as to allow inclusion into the quarterly reports.

The Contractor shall provide quarterly reports, including addenda and corrigendum, to the Contract Manager in both written and digital formats. Digital formats at a minimum need only include the portions of the quarterly reports prepared by the Contractor. The Contract Manager shall ensure the quarterly reports prepared by the Contractor are distributed to the Steering Committee Members for review and comments. Upon receipt of the quarterly report, the Chairman shall set up a quarterly meeting. At the quarterly meeting, the data will be reviewed and the Contractor will be available for questions. The Members of the Steering Committee, a quorum being present, shall then vote whether or not to accept the data as valid based on quality assurance criteria as approved by the CARB and the LCAQMD (Appendix V provides an example). The Contractor will send directly to the Steering Committee Members any corrections to the data that might be needed to make the data volume accurate and complete.

IX. WITHDRAWAL

A. RIGHT TO WITHDRAW

Any Party may withdraw from this Agreement at any time by giving written notice to the Steering Committee, except that such withdrawal will not relieve the Party from the financial obligations of this Agreement to provide its share of the costs and expenses through the completion of the subsequent fiscal year computed using Appendix IV.

B. PAYMENT AND FAILURE TO PAY COSTS

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Bills shall be due forty-five (45) days after billing date. Any Party which is more than forty-five (45) days past due in the payment of its allocated share of costs and expenses as calculated in Article VI shall be notified in writing by the Contract Manager. Unless such failure to pay is cured within an additional forty-five (45) days the Contract Manager shall refer the matter to the Steering Committee at the next regular meeting for review and determination of follow-up actions to be taken. Any payment made by any Party more than forty-five (45) days after the billing date shall include interest equal to the maximum percent allowed by law for state agencies, but shall not exceed 20 % on an annual basis.

In the event any amount required to be paid under this Agreement is not paid when due, the Contract Manager may institute legal action in a court of competent jurisdiction in Sonoma County, to collect such amount plus interest thereon. In any such action, the prevailing Party shall be entitled to court costs and reasonable attorney fees to be fixed by the court.

X. ASSIGNMENT

Any Party may assign its obligations under this Agreement to another entity (assigned party) where such assignment is the result of sale, acquisition, or other legal mechanism of transfer. The assigning party shall provide written notice of all assignments to the Steering Committee at a noticed meeting. The assigning party shall pay the Contract Manager any costs accrued by the Contract Manager in effecting such assignments. Where such assignments are between original GAMP VI Members, the assigned party shall then be responsible for the sum of allocated cost shares equal to the sum of its original megawatt obligation plus those of the assigning party and the sum of the base costs. Where such assignment is to a party not originally a GAMP VI Member, the assigned party shall then be responsible only for the share costs of the assigning party and shall not be considered an Additional Participant pursuant to Article XI. Upon completion of such assignments the assigning Party shall be deemed absolved of all responsibilities under this Agreement.

XI. ADDITIONAL PARTICIPANTS

After the effective date of this Agreement, any firm or corporation who desires to participate in the conduct of the monitoring services ("Additional Participants") may become a Party hereto by executing a copy of this Agreement or other instrument in writing agreeing to become a Party hereto. Such Additional Participants shall agree to be bound in all respects by the terms hereof, including a reallocation of share costs as provided for in Article VI. The allocated cost share of Additional Participants shall be prorated for the first fiscal year, and applied to the reserves, if the billing for the fiscal year has already occurred. Payment of such sums and agreement to the terms and conditions hereof shall be a condition precedent to participation.

XII. NON PARTNERSHIPS STATUS

This Agreement is intended to provide for the joint sharing of costs. The obligations under this Agreement are intended to be separate and not joint or collective, and nothing in this

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Agreement shall be construed as creating a partnership or joint venture. Each Party hereby elects to be excluded from the application of Subchapter K of Chapter I of Subtitle A of the Internal Revenue Code of 1954, or such portions thereof as may be permitted or authorized by the Secretary of the Treasury of the United States or delegate insofar as such Subchapter, or any portions thereof, may be applicable to the Parties. Each of the participating Parties shall be solely responsible for any loss or liability occasioned by that Party's or their employees' actions relating to this Agreement.

XIII. TERMINATION

Notwithstanding Section IX.A, in the event the legislature or the governing body of any state or local agency who is a Party to this Agreement (as a Regulatory Member identified in Appendix I) fails to appropriate the funds for any subsequent fiscal year as committed to GAMP VI by such Party and such failure would cause a local agency to be in violation of Article 16, Section 18 of the California Constitution, such Party may withdraw from this Agreement and have no other financial liability hereunder.

In the event of such a withdrawal, any other Party or Parties hereto may elect to contribute such withdrawing Party's contribution. If such other Party or Parties elect to pay the withdrawing Party's contribution, this Agreement shall continue in full force and effect.

If no Party or Parties elect to pay such withdrawing Party's contribution, any remaining Parties may elect to withdraw from this Agreement and have no further financial liability beyond the current fiscal year unless the Steering Committee by the unanimous vote of all remaining Parties agrees to reduce the scope of work provided for herein so that the remaining Parties' financial obligation does not increase. If the Steering Committee does not reach a unanimous vote then, notwithstanding Section IX.A, this Agreement shall terminate.

XIV. BANKRUPTCY OF PARTICIPANT

In the event of commencement by a Party hereto of any voluntary proceedings under the bankruptcy law of the United States, or of the failure of a Party to terminate any involuntary proceeding under such bankruptcy law within sixty (60) days of commencement thereof, or of a general assignment for the benefit of creditors of a Party, or of an assignment by operation of law, the Party instituting the proceeding shall immediately give notice of a bankruptcy or assignment to the Contract Manager. The Contract Manager shall refer the matter to the Steering Committee at the next regular meeting for review and determination of follow-up actions to be taken. Such actions by the Steering Committee may include but are not limited to:

Determining the nature of the proceedings;

Based on the nature of the proceedings, The Steering Committee shall recommend, by motion, an appropriate course of action in response to the proceedings; and,

If necessary, direct the Contract Manager to take such steps as appropriate to secure the consortium's position in such proceedings.

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XV. COUNTERPART EXECUTION

This Agreement may be executed in as many counterparts as deemed necessary and, when so executed, shall have the effect as if each executing Party has executed all of counterparts.

XVI. MODIFICATIONS

Notwithstanding Article III, Sections B and C, this Agreement may be modified only upon the written agreement of all signatory Parties.

XVII. PROGRAM INTEGRITY

All Parties agree that GAMP VI as presently structured is a program designed to achieve its stated purpose.

The CARB and the LCAQMD agree to perform the quality assurance for the H₂S, meteorological, and non criteria-monitoring program. Such a program shall be as approved by the CARB and the LCAQMD and performed by the CARB and the LCAQMD without charges to the Consortium. A quality assurance program similar to that in Appendix V will be conducted.

XVIII. COOPERATION

All Parties agree to cooperate in good faith with one another, the Contract Manager and any Contractor hired pursuant to this Agreement in carrying forward the ambient air monitoring program provided for herein.

Each of the Appropriate Parties shall only be responsible for any loss or liability occasioned by that Party's or their employee's participation in this Agreement. The Contractor shall have no liability arising from, or connected with its services, except as set forth in the Agreement for Consulting Services.

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APPENDIX I
CONSORTIUM MEMBERSHIP

A. CONSORTIUM MEMBERS OR SUCCESSORS

1. REGULATORY MEMBERS	VOTE ALLOCATION
☐ California Air Resources Board (CARB)	2
☐ Lake County Air Quality Management District (LCAQMD)	2
☐ Northern Sonoma County Air Pollution Control District (NSCAPCD)	2

2. INDUSTRY MEMBERS:	VOTE ALLOCATION
☐ Geysers Power Company LLC (GPC)	3
☐ Northern California Power Agency (NCPA)	2
☐ Bottle Rock Power Corporation (BRPC)	1

3. STATE AND PUBLIC MEMBERS:	VOTE ALLOCATION
☐ California Energy Commission (CEC)	1
☐ One Public Member from the Anderson Springs Community Service District	1
☐ One Public Member from the Friends of Cobb Mountain	1

B. EXISTING OR PERMITTED FACILITIES COVERED BY GAMP VI

This Agreement covers those steam fields and any subsequent steam field development. GAMP VI covers all of the steam fields and steam field equipment associated with the facilities listed below.

GPC Units 5 & 6 and Steam Field	GPC Units 7 & 8 and Steam Field
GPC Units 9 & 10 and Steam Field	GPC Unit 11 and Steam Field
GPC Unit 12 and Steam Field	GPC Unit 13 and Steam Field
GPC Unit 14 and Steam Field	GPC Unit 16 and Steam Field
GPC Unit 17 and Steam Field	GPC Unit 20 and Steam Field
GPC Unit 18 and Steam Field	GPC Northeast Geysers Unit Steam Field Development
GPC Sonoma Power Plant and Steam Field	GPC Aidlin Power Plant and Steam Field
GPC Calistoga Power Plant and Steam Field	GPC Silverado Geothermal Resources Steam Field
GPC Bear Canyon Power Plant and Steam Field	GPC West Ford Flat Power Plant and Steam Field
NCPA Plant 1 Unit 1 & 2	NCPA Plant 2 Unit 3 & 4
NCPA Steam Field	
Bottle Rock Power Plant and Steam Field	

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CONSORTIUM MEMBERSHIP

C. SIGNATURE PAGE FOR PARTIES OF THE GEYSERS AIR MONITORING PROGRAM
PHASE VI MOU BEGINNING JULY 1, 2006

CALIFORNIA AIR RESOURCES BOARD

Name (print): JAMES N. GAGLIARDI

Signature: [Signature]

Title: EXECUTIVE OFFICER

Date: FEB 15, 2008

BOTTLE ROCK POWER CORPORATION

Name (print): _____

Signature: _____

Title: _____

Date: _____

CALIFORNIA ENERGY COMMISSION

Name (print): _____

Signature: _____

Title: _____

Date: _____

GEYSERS POWER COMPANY LLC

Name (print): _____

Signature: _____

Title: _____

Date: _____

LAKE COUNTY AIR QUALITY
MANAGEMENT DISTRICT

Name (print): _____

Signature: _____

Title: _____

Date: _____

NORTHERN CALIFORNIA POWER AGENCY

Name (print): _____

Signature: _____

Title: _____

Date: _____

NORTHERN SONOMA COUNTY AIR
POLLUTION CONTROL DISTRICT

Name (print): _____

Signature: _____

Title: _____

Date: _____

Name (print): _____

Signature: _____

Title: _____

Date: _____



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APPENDIX I
CONSORTIUM MEMBERSHIP

SIGNATURE PAGE FOR PARTIES OF THE GEYSERS AIR MONITORING PROGRAM
PHASE VI MOU BEGINNING JULY 1, 2006

CALIFORNIA AIR RESOURCES BOARD

Name (print): _____

Signature: _____

Title: _____

Date: _____

BOTTLE ROCK POWER CORPORATION

Name (print): _____

Signature: _____

Title: _____

Date: _____

CALIFORNIA ENERGY COMMISSION

Name (print): _____

Signature: _____

Title: _____

Date: _____

GEYSERS POWER COMPANY LLC

Name (print): _____

Signature: _____

Title: _____

Date: _____

LAKE COUNTY AIR QUALITY
MANAGEMENT DISTRICT

Name (print): *Anthony J. Ferguson*

Signature: _____

Title: *Chair* Lake County Board of
Supervisors

Date: *March 21, 2006*

NORTHERN CALIFORNIA POWER AGENCY

Name (print): _____

Signature: _____

Title: _____

Date: _____

NORTHERN SONOMA COUNTY AIR
POLLUTION CONTROL DISTRICT

Name (print): _____

Signature: _____

Title: _____

Date: _____

Name (print): _____

Signature: _____

Title: _____

Date: _____

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APPENDIX II
DESCRIPTION AND SCOPE OF PROGRAM

A. The scope of the Geysers Air Monitoring Program, Phase VI (GAMP VI) consists of the following:

1. H₂S/Meteorological data collection at the following locations:
 - a. Pine Summit Estates
 - b. Anderson Springs
 - c. Glenbrook
2. Meteorological Measuring Stations at the following locations:
 - a. GPC Unit 13 existing met site
 - b. GPC Unit 17 existing met site
3. PM-10 stations (particulate matter less than 10 micron) using PM-10 samplers approved by the consortium at the following locations (may be reduced in scope to include a single rotating monitor at Glenbrook, Anderson Springs, and Pine Summit, upon request of the LCAQMD APCO and concurrence of the Steering Committee):
 - a. Glenbrook
 - b. Anderson Springs.

The PM-10 filters are to be collected by the LCAQMD and will be analyzed by CARB using X-ray fluorescence for the following constituents:

Arsenic

Vanadium

Mercury

Sulfur

Additional elements as provided by the CARB or otherwise agreed to by the Steering Committee

4. Radon sampling will be performed at the following locations:
 - a. Glenbrook
 - b. Anderson Springs.

This sampling will be conducted by the LCAQMD and data shall be submitted directly to the Contractor for inclusion in the quarterly data sets. This is a quarterly sampling program.

B. Substitution or termination to program elements A.2 and A.3 above to include alternative monitoring recommendations is allowed under the scope of this program subject to review and approval by a majority vote of the Steering Committee in favor of such changes and the approval of both Air Districts.

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APPENDIX III
TERM OF FUNDING AND PAYMENTS
Attachment 1, Annual Budget - Fifth Year Update

I. TERM OF FUNDING

- A. The term of funding for this fiscal year of the Geysers Air Monitoring Program (GAMP VI) shall be the twelve (12) month period beginning July 1, 2006 ending June 30, 2007. Subsequent terms of funding shall coincide with the anniversary of beginning of the first period.

II. BUDGET FOR EACH TERM OF FUNDING

The budget for the Fourthfiscal year of GAMP VI funding is shown in Section III "Itemized Operating Costs (2006 Dollars)." The budget for each subsequent fiscal year of GAMP VI funding shall be prepared and adopted in the form of an updated Itemized Operating Costs for each forthcoming fiscal year. The budget for each subsequent term of funding is to be determined annually prior to the next term of funding. Upon Extension of Agreement by representatives of each Party, the annual budget becomes an approved attachment to this MOU as an annual update to Appendix III, hereinafter referred to as "Appendix III, Attachment 2, Annual Budget." The budget figures take into account the scope of work required per Appendix II, additional scope as determined necessary and approved by the Steering Committee, the contractor's fixed priced, or fees and hours estimated to perform the work, operating expenses and inflation. The portion of budget that accounts for the Contractor Operating Cost is based upon the fixed priced, or scope of work and hours estimated for completing that work in conjunction with the contractor's table of hourly billing rates. The initial hourly billing rates are provided in Attachment 2 of this appendix. The Steering Committee shall annually review the contractor's proposed table of hourly billing rates (Schedule 1 - Payments). Upon Extension of Agreement by representatives each Party, Schedule 1 - Payments becomes an approved attachment to this MOU as an annual update to Appendix III, hereinafter referred to as "Appendix III, Attachment 2, Schedule 1 - Payments," for the purposes of determining the contractor costs portion of the approved annual budget.

III. ITEMIZED OPERATING COSTS (2006 DOLLARS)		Per Year*
A.	Contractor Operating Costs	\$135,000
B.	Equipment repair, and replacement	-
C.	Non-Criteria Program	
	PM-10 Maintenance	\$1,030
	XRF Analysis (\$25/sample)	\$3,100
	Radon Sampling (Track Etch)	\$1,500
D.	Insurance	\$2,575
E.	Anderson Springs Electric Utilities	\$2,500
F.	Pine Summit Electric Utilities	\$2,000
G.	Glenbrook Electric Utilities	\$1,500
H.	Glenbrook Lease	\$1,800
I.	Telephone Utilities	\$1,500
J.	10% Contingency	\$15,622
Total Operating Costs		\$171,843

* Rounded to nearest dollar.

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APPENDIX III
TERM OF FUNDING AND PAYMENTS
Attachment 1, Annual Budget - Fifth Year Update

IV. TIMELY BUDGET APPROVAL FOR EACH TERM OF FUNDING

In the event that an Annual Budget is not approved by the Steering Committee, in time to support the renewal of contractor's services, the Contract Manager shall adopt an interim budget based upon the previous years approved annual budget for the basic program scope of work adjusted by an appropriate CPI not to exceed 5%.

V. COST FREE SERVICES AND/OR EQUIPMENT

The following cost free services and/or equipment shall be provided for the duration of GAMP VI:

- A. The NSCAPCD shall permit the Contractor to utilize its Pine Summit station. This station shall be returned to the NSCAPCD intact, complete and in good working order at the end of GAMP VI. Obsolescence and withdrawal of factory support for any equipment originally present at the time the station was given for use to the Contractor at commencement of GAMP VI shall be cause for replacement at the expense of GAMP VI Consortium.
- B. The LCAQMD shall permit the Contractor to utilize its Anderson Springs Recreation Center station. This station shall be returned intact, complete and in good working order at the end of GAMP VI to the LCAQMD. Obsolescence and withdrawal of factory support for any equipment originally present at the time the station was given for use to the Contractor at commencement of GAMP VI shall be cause for replacement at the expense of GAMP VI Consortium. In addition, the LCAQMD shall perform Quality Assurance audits for GAMP VI as stated in Appendix V.
- C. The LCAQMD shall permit the Contractor to utilize its Glenbrook station. This station shall be returned intact, complete and in good working order at the end of GAMP VI to the LCAQMD. Obsolescence and withdrawal of factory support for any equipment originally present at the time the station was given for use to the Contractor at commencement of GAMP VI shall be cause for replacement at the expense of GAMP VI Consortium. In addition, the LCAQMD shall perform Quality Assurance audits for GAMP VI as stated in Appendix V.
- D. The CARB shall perform the GAMP VI services listed in Appendix VI.
- E. GPC shall permit the Contractor to utilize its Unit 17 met station. This station shall be returned intact, complete and in good working order at the end of GAMP VI to GPC. Obsolescence and withdrawal of factory support for any equipment originally present at the time the station was given for use to the Contractor at commencement of GAMP VI shall be cause for replacement at the expense of GAMP VI Consortium.

GAMP VI
Memorandum of Understanding

APPENDIX III
TERM OF FUNDING AND PAYMENTS
Attachment 1, Annual Budget - Fifth Year Update

- F. GPC shall permit the Contractor to utilize its Unit 13 met station. This station shall be returned intact, complete and in good working order at the end of GAMP VI to GPC. Obsolescence and withdrawal of factory support for any equipment originally present at the time the station was given for use to the Contractor at commencement of GAMP VI shall be cause for replacement at the expense of GAMP VI Consortium.
- G. The GAMP Consortium shall permit the Contractor to utilize its Pentium IV based Supervisory Control PC. This PC shall be returned to the GAMP Consortium intact, complete and in good working order at the end of term of the contract for GAMP VI. Obsolescence and withdrawal of factory support for any equipment originally present at the time the Supervisory Control PC was given for use to the Contractor at commencement of GAMP VI shall be cause for replacement at the expense of GAMP VI Consortium.

GAMP VI
Memorandum of Understanding

APPENDIX III
TERM OF FUNDING AND PAYMENTS
Attachment 2, Schedule 1 - Payments

Schedule 1 - Payments

- A. **Term of Contract**: The term of this contract shall be 36 months commencing July 1, 2005 through June 30, 2008.
- B. **Yearly Rate**: Contractor shall initially be paid at a yearly rate of \$134, 676 in twelve monthly payments of \$11,223 for all services and materials required under Sections 1.1 and 1.2.
- C. **Extra Work**: Contractor shall be paid on a time-and-materials basis for work authorized under Section 8 of this Agreement at the following rates:

<u>Classification</u>	<u>Hourly Billing Rate</u>
Technologist	\$75.00
Word Processor	\$45.00
Mileage	\$0.36 per mile
Purchased Items	Cost + (up to) 10%
Subcontracted Services	
(Additional audits and calibrations)	Cost + (up to) 10%
Office Expense	Cost + (up to) 10%

- D. **Cost of Living Adjustment**: A cost of living adjustment of no more than 3 percent per year based on the California Price Index (All Wage Earners) shall be used to adjust the yearly rate if necessary. The determination of the CPI shall be based on a 12 month average using the April index from the prior year to current fiscal year March index.

GAMP VI
Memorandum of Understanding

APPENDIX III
TERM OF FUNDING AND PAYMENTS
Attachment 3, SIGNATURE PAGE FOR ANNUAL FUNDING EXTENSIONS

REVISION JULY 1, 2006

GEYSERS POWER COMPANY LLC

Name (print): _____

Signature: _____

Title: _____

Date: _____

NORTHERN CALIFORNIA POWER AGENCY

Name (print): _____

Signature: _____

Title: _____

Date: _____

BOTTLE ROCK POWER CORPORATION

Name (print): _____

Signature: _____

Title: _____

Date: _____

GAMP VI
Memorandum of Understanding

APPENDIX IV
COST ALLOCATIONS

Each Industry Member's allocation of share cost shall be computed using the following formulas:

I. DEFINITION OF TERMS

Projected Actual Cost	AC
Reserves, (left over from previous years)	R
Number of Parties Participating	N
Base Cost	BC
Percent Load Share	LS
Percent Load Share Power Plant	LSP
Percent Load Share Steam field	LSF
Party's Cost	PC
Other Dollars,	OD
Gross megawatts produced as defined in Table IV-1	GMW

II. CLASSES

Class 1	Party Producing Electricity
Class 2	Party Producing Steam & Electricity
Class 2A	Party Producing Steam & Electricity at unequal megawatt value
Class 3	Party Producing Steam
Class 4	Interested (proposed but not yet constructed).

III. EQUATIONS

$LS = \text{GMW Electricity Produced By Party (or Steam Supplied for said production) / GMW Produced in Geysers}$

$LSP = \text{GMW Electricity Produced by Party / GMW Produced in Geysers}$

$LSF = \text{GMW Steam Produced by Party / GMW Produced in Geysers}$

$BC = (AC-OD) \times 30/N$

IV. ALLOCATION OF SHARE COST FORMULA ACCORDING TO PARTY CLASS

Class 1	$PC = BC + [LS \times 0.75 \times (AC-R-(N \times BC)-OD)]$
Class 2	$PC = BC + [LS \times (AC-R-(N \times BC)-OD)]$
Class 2A	$PC = BC + [LSP \times 0.75 \times (AC-R-(N \times BC)-OD)] + [LSF \times 0.25 \times (AC-R-(N \times BC)-OD)]$
Class 3	$PC = BC + [LS \times 0.25 \times (AC-R-(N \times BC)-OD)]$
Class 4	$PC = BC$

V. ADJUSTED COST FORMULA ACCOUNTING FOR ACQUISITIONS

The number N shall not change as a result of Acquisitions. Any party acquiring an existing member shall be obligated to pay the acquired member's base cost in addition to the adjustment to load share.

GAMP VI
Memorandum of Understanding

**APPENDIX IV
COST ALLOCATIONS**

For the equations defining LS, LSP, and LSF for each party, Table IV-1 is a listing of the name plate rated Gross Megawatts for the Power Plants existing at The Geysers as of July 1, 2006.

TABLE IV-1

	Power Plant Name	Power Plant Name Plate Capacity (GMW)	Steamfield Capacity (GMW)	Total Capacity Gross (GMW)	LS Load Share	Class	N
Industry Members							
GPC							
	Aidlin	Unit 1	25				
	Bear Canyon	Unit 2	22				
	Sonoma	Unit 3	72				
	West Ford Flat	Unit 4	30				
	McCabe	Units 5&6	110				
	Ridge Line	Unit 7&8	110				
	Fumarole	Unit 9-10	110				
	Eagle Rock	Unit 11	110				
	Cobb Creek	Unit 12	110				
	Big Geysers	Unit 13	137				
	Sulphur Springs	Unit 14	114				
	Quicksilver	Unit 16	119				
	Lake View	Unit 17	119				
	Socrates	Unit 18	119				
	Calistoga	Unit 19	86				
	Grant	Unit 20	119				
	GPC total		1512	1512	84.24%	2	7
NCPA							
	Plant 1	114					
	Plant 2	114					
	NCPA total		228	228	12.70%	2	1
BRPC							
	Bottle Rock	55					
	BRPC total		55	55	3.06%	2	1
The Geysers Total							
			1795	1795	100.00%		9

GAMP VI
Memorandum of Understanding

APPENDIX V
QUALITY ASSURANCE

INTRODUCTION

These quality assurance program criteria are intended to be practicable and consistent with stated GAMP VI objectives of a credible high quality program. The effort is directed primarily to ensure rigorous quality assurance of the hydrogen sulfide monitoring effort. The quality assurance program is to be a joint effort of the Lake County Air Quality Management District (LCAQMD) and California Air Resources Board (CARB).

HYDROGEN SULFIDE QUALITY CONTROL AND ASSURANCE

The quality assurance program requirements shall be approved by the CARB/LCAQMD. The quality assurance program of the Contractor is to be approved by the CARB/LCAQMD. Comments on the quality assurance programs shall be made when station operation audits are conducted by the LCAQMD/CARB.

These requirements are regarded as the minimum necessary for the control and assessment of the quality of the ambient air monitoring data.

The Contractor shall implement a quality control program consisting of policies, procedures, specifications, standards and documentation necessary to minimize loss of air quality data due to malfunctions or out-of-control conditions and to assure high quality results.

The quality control program must be described in detail, suitably documented and approved by CARB/LCAQMD.

As a minimum, each written quality control program shall contain the following items:

1. Calibration procedures in detail, including methodology.
2. Zero and span checks and adjustments of automated analyzers.
3. All control checks and their frequency.
4. Control limits for zero, span and other control checks, and respective corrective actions when such limits are exceeded
5. Calibration, precision and zero/span check frequency and methodology.
6. Preventive and remedial maintenance.
7. Recording and validating data reported.
8. All calibration results shall be forwarded to LCAQMD within thirty (30) days for review and all operational logs shall be available for review upon request.
9. Station logs as required in the next section shall be part of the quality control program.

STATION LOGS

All air monitoring stations shall keep a log on site in which all visitors or participants of GAMP VI shall note the time of their arrival, departure and purpose of visit. The only exception to this requirement shall be a blind audit performed by the NSCAPCD or LCAQMD as part of the quality assurance program. Station operators shall enter into this log or make reference to carbon copies of approved forms containing all pertinent information as regards the routine station operational checks, precision checks, scrubber checks, converter checks, any equipment changes, zero checks, span checks, calibration checks or changes, any corrective actions including routine maintenance, problems noted and general comments. Carbon copies of these forms shall be kept on site in good order in a clearly marked binder for a period of six (6) months after noted log entry at each air monitoring station.

GAMP VI
Memorandum of Understanding

APPENDIX V
QUALITY ASSURANCE

VISUAL INSPECTIONS

All stations shall be inspected on a monthly basis to determine operation compliance with the quality assurance program. This inspection will include exterior visual inspection to assure the free and unobstructed operation of the station equipment. Interior inspections will be comprised of but not limited to inspections of station logs, calibrations, sample lines, environmental control, scheduled and nonscheduled maintenance, updating of logs or other documentation related to station operation. Copies of the report will be transmitted to the Contract Manager, the appropriate agency and the station operator.

HYDROGEN SULFIDE SAMPLE PROBE

The type of analyzer used to monitor hydrogen sulfide must be approved by the CARB. If the analyzer used requires a SO₂ scrubber and/or hydrogen sulfide converter, the efficiency of the scrubber or converter must be checked on a weekly basis and any failure of the device to achieve a 95% efficiency rating will be immediately corrected and reported to the LCAQMD. Analyzers shall be operated in a temperature-controlled environment, which is maintained at 25 °C ± 5 °C. Temperature records shall be kept and documented by means of a continuous chart record.

All hydrogen sulfide analyzers shall be operated in their approved range. The analyzer output is to be recorded in 0-100 ppb full scale readings on a single channel of a dual channel recorder of not less than 10" chart width. The second channel shall record H₂S in the 0-.5 or 0-1 ppm range. Two single channel recorders or an LCAQMD approved multi-channel recorder may be substituted, but the 0-100 ppb recording shall be no less than 10" in width. Data loggers and telemetered data gathering are required but not to the exclusion of strip chart recordings. A percentage of strip chart recordings shall be compared to data logger or telemeter results consistent with the quality assurance program.

HYDROGEN SULFIDE ANALYZER STANDARDS

Gaseous standards (permeation tubes, permeation devices or cylinders of compressed gas) used to obtain test concentrations for hydrogen sulfide or sulfur dioxide must be working standards certified by comparison to a National Institute of Standards and Technology (NIST) gaseous Standard Reference Material (SRM). Flow measurements of calibration devices, permeation ovens and gas dilution systems shall be made using devices with precision traceable to the NIST or other authoritative standard.

HYDROGEN SULFIDE ANALYZER PRECISION CHECKS

A one-point precision check, independent of any daily automatic span check shall be conducted by the Contractor on a weekly basis on each analyzer. The precision check shall challenge the analyzer under test with a gas concentration between 0.02 and 0.04 ppm. The use of hydrogen sulfide permeation tubes for this check are discouraged. A weekly check of converter or SO₂ scrubber efficiency shall be performed during the precision check. Analyzers must be operated in their normal sampling mode during precision checks. The test atmosphere must pass through all filters, scrubbers, converters and other components used during normal ambient sampling and as much of the sampling probe as is practical. The results of the precision checks shall be entered into the station log.

Precision check failure shall cause a second check to be performed and efforts to promptly locate the cause of failure of the calibration or analyzer system will be immediately initiated. This second check shall be made prior to any re-calibration or span adjustment. Any change in response which exceeds a 15% correction shall cause a re-calibration and reporting of a malfunction to the LCAQMD. Corrective action taken upon the questionable data shall also be reported in writing to the LCAQMD/CARB. A notification shall be made to the LCAQMD/CARB in the event of equipment replacement and subsequent start up calibration so that an accuracy check may be performed on a timely basis. If a precision check is made in conjunction with zero/span

GAMP VI
Memorandum of Understanding

APPENDIX V
QUALITY ASSURANCE

adjustment, it must be made prior to such zero and span adjustments and so indicated on the station log. The difference between the actual concentration of the precision check gas and the concentration indicated by the analyzer shall be used to assess the precision of the monitoring data.

HYDROGEN SULFIDE ANALYZER PRECISION REPORT

The Contractor shall at the end of each sampling quarter calculate and report to LCAQMD for inclusion into the GAMP VI quarterly report a precision probability interval for each analyzer.

HYDROGEN SULFIDE ANALYZER ACCURACY CHECKS

Each analyzer is to be audited at least once each sampling quarter by the LCAQMD or CARB. A gas dilution system certified by the CARB shall be utilized for accuracy checks. The audit is to include a performance check of zero using pure air and checks at those concentrations as indicated below which fall within the analyzers measurement range:

<u>Audit Point</u>	<u>Concentration Range (ppm)</u>
Zero	Zero
1	0- 0.04
2	0.04-0.10
3	0.10-0.20
4	0.20-0.30
5	0.30-0.40
Zero	Zero

Gas standards and equipment used for accuracy auditing shall be different from the standards and equipment used for calibration, precision checks, and span checks. The auditing gas standards shall be certified as acceptable by the CARB. The accuracy check shall be carried out by allowing the analyzer to sample an audit test atmosphere in a manner as close to ambient air monitoring as practical.

The difference between the actual concentration of the audit test gas and the concentration indicated by the analyzer's primary recording device shall be used to assess the accuracy of the monitoring data.

HYDROGEN SULFIDE ACCURACY REPORT

The LCAQMD shall at the end of each sampling quarter calculate and report to the Contractor for inclusion in the quality report the percentage difference for each audit concentration for each analyzer audited during the quarter. Calculations are as approved by the CARB.

METEOROLOGICAL STATION

The LCAQMD shall be notified by the Contractor five (5) days prior to meteorological quality control operations being performed on the station. The LCAQMD shall observe at least one station quality control check per year per station.

GAMP VI
Memorandum of Understanding

APPENDIX VI

CALIFORNIA AIR RESOURCES BOARD (CARB) AND LAKE COUNTY AIR QUALITY
MANAGEMENT DISTRICT (LCAQMD) PARTICIPATION IN GEYSERS AIR MONITORING
PROGRAM (GAMP VI)

A. CARB PARTICIPATION

1. The following represents the services and equipment that will be provided by the CARB, in lieu of any cash contributions, for this program at no cost to GAMP VI.
 - a. CARB will certify span gases and calibration mass flow controllers, which are provided by the LCAQMD.
 - b. CARB will audit each analyzer and sampler annually.
2. The following fees for service will be billed to GAMP VI by the CARB.
 - a. PM-10 collected at the Glenbrook and Anderson Springs sites on Teflon filter media using PM-10 samplers will be analyzed using X-ray Fluorescence Spectroscopy equipment the CARB's Monitoring and Laboratory Division (MLD) in Sacramento. Filters for this sampling will be provided by the LCAQMD or the MLD. The Technical Support Division will send the results of the analysis to the Contractor and the LCAQMD in such a timely manner so as to allow incorporation into the quarterly data volumes. The cost of analysis, including filter, is \$25 per sample. Billing is to be made directly to the Contract Manager for payment.

B. LCAQMD PARTICIPATION

1. The following represents the services and equipment that will be provided by the LCAQMD for this program at no cost to GAMP VI.
 - a. LCAQMD will conduct their portion of the quality assurance program as established in Appendix V.
2. The following fees for service will be billed to GAMP VI by the LCAQMD.
 - a. LCAQMD will install, operate and maintain samplers for PM-10 at the Anderson Springs and Glenbrook sites, as described in Appendix II. Filters for this sampling will be provided by the LCAQMD or the MLD. LCAQMD personnel will collect these samples and forward them to the MLD laboratory no later than 10 days after the scheduled sampling date. Each sample submitted to the CARB will be accompanied by a properly completed Form. As payment for this service the GAMP VI Consortium agrees to pay the electrical utilities for the Anderson Springs site. The Consortium also agrees to pay for the maintenance and repairs of the samplers when necessary. The Contract Manager will reimburse the LCAQMD for the electrical utilities and sampler maintenance costs. In the event a change in sampling methodology occurs it shall be with the concurrence of Districts, the CARB, and the Consortium.