COUNTY OF LAKE
COMMUNITY DEVELOPMENT DEPARTMENT
Courthouse - 255 N. Forbes Street
Lakeport, California 95453
Telephone 707/263-2221 FAX 707/263-2225

California Energy Commission
DOCKETED
12-CAI-04
TN # 69110
JAN. 11 2013

TO: California Energy Commission

FROM: Richard Coel, Community Development Director, County of Lake
Prepared by: Will Evans, Assistant Resource Planner, County of Lake

RE: 12-CAI-04 – County of Lake Comments

DATE: January 10, 2013

ATTACHMENTS: 601 - Use Permit Conditions for UP 85-27 and UP 09-01
602 - County of Lake Bonds for the Bottle Rock Power Site

Please review the follow information items as they relate to the Commission's request for more information regarding these specific areas of interest.

Item #1: County Use Permit (UP 85-27) Condition J.5 requires the permit holder to submit a reclamation plan for approval to the Community Development Department at the time of abandonment. Currently no reclamation plan has been prepared or submitted to the Community Development Department relating to reclamation and decommissioning. When the project is slated to be closed and abandoned, a plan must be submitted and approved by the County fully explaining what will happen to the existing structures. Conformance of existing structures with County Development Standards will be evaluated at the time of reclamation plan approval and will most likely depend on the final end use of the property. The power plant building has several possible end uses, post-closure, such as a winery or wine storage facility. The Rural Lands (RL) zoning of the site provides for significant flexibility for future uses. Use permit conditions are included as **Attachment 601**.

Item #2: The County does not have an estimate for the cost of remediating the power plant and/or steam fields. However, the power plant and wells are outside of our jurisdiction and our concern is with the surface improvements between the plant and wells. It is not anticipated that the well pads and roads will have to be restored to natural grade once the site is eventually abandoned. Therefore, the County believes that the bonding required by the use permit is adequate for the reclamation that would fall under our jurisdiction. As stated in Item #1, the conditions of the use permit allow the permit holder to defer establishing a formal reclamation plan until the time that the facility is abandoned. Without a plan explaining specifically what reclamation activities will be completed (pipeline removal, well pad re-grading, building demolition, etc.) no reliable cost estimate can be generated.

Item #3: The County has no information to provide relating to this item.

Item #4: The County has no information to provide relating to this item.

Item #5: Lake County has two bonds for the Bottle Rock Power site. The first bond is for the existing use permit UP 85-27 in the amount of $706,331 and is "to insure clean up in case of spills, landslides, mishaps and site reclamation upon abandonment." The second bond is for the recently approved steam field expansion; Use Permit UP 09-01. The bond associated with this project is $81,510 and is "to insure clean up in case of spills, landslides, mishaps and site reclamation upon abandonment." Copies of these bonds have been included for your information as **Attachment 602**.

Item #6: The County is not aware of any environmental impairment insurance policies, for which it is a party to, relating to this site.

Item #7: County of Lake Use Permit Conditions for the steam field are attached. Please note that the permit holder has applied for a time extension of Use Permit UP 85-27 and a public hearing will be held by the Lake County Planning Commission on January 24, 2013. The use permit conditions are included as **Attachment 601**.

COPY

COUNTY OF LAKE

AMENDED USE PERMIT 85-27 (MMU 10-01)

(Formerly Amended Use Permit UP 85-27)

BOTTLE ROCK POWER, LLC STEAMFIELD GEOTHERMAL PROJECT

Pursuant to the approval of the Lake County Board of Supervisors on February 19, 1980, and as amended by the Lake County Planning Commission on July 29, 1982, March 14, 1985 and June 26, 1986, **and further modified on January 13, 2011,** there is hereby granted to Bottle Rock Power, LLC, P.O. Box 326, Cobb, CA 95426, a Use Permit for the construction of a geothermal steamfield including up to twenty-seven (27) geothermal development wells from three (3) pads. Pads and numbers of wells shall be limited to the following: Francisco (9), Coleman (6), West Coleman (12). This permit also allows a total of twenty-seven (27) redrilling of well bores in new directions and/or replacement wells and unlimited rework of the ~~41~~ 27 permitted wells. The authorized project also includes associated support equipment necessary for geothermal field operations consistent with the approved plan of development, steam and condensate pipelines, sediment catchment basins, water monitoring facilities, access roads, spoil site (Francisco Spoil Area) and reinjection wells, along with incidental uses and activities; further described in condition D.1 through 5 of this use permit and identified in the Plan of Development in the Supplemental EIR dated December 1985 as amended to exclude Hodges, Power Pole, and Modified Boriak pad sites in accordance with the Lake County Ordinance Code. The project is located in the Cobb Valley along High Valley Road in Section 5 & 6, T11N, R8W, MDB&M, on approximately 390 acres identified as Lake County Assessors parcel numbers 013-002-03, 04 & 05; near the communities of Glenbrook and Pine Grove.

The Planning Commission, finds that the establishment and maintenance or operation of the use for which application is made will not, under the circumstances of this particular case, be detrimental to the health, safety, peace, morals, comfort and general welfare of persons residing or working in the neighborhood of such use, or be detrimental to the general welfare of the County.

The Planning Commission has caused to be prepared an Environmental Impact Report and Supplements on the subject of this application and has held public hearings thereon and has carefully considered this matter pursuant to the California Environmental Quality Act and the State CEQA Guidelines pertaining thereto, and pursuant to the Environmental Protection Guidelines of the County of Lake.

I. APPROVAL IS SUBJECT TO THE FOLLOWING TERMS AND CONDITIONS:

1. The Use Permit shall be valid until June 26, 2013. However, if the corrective measures required by this modified Use Permit are not initiated within sixty (60) days of approval of the Amended Use Permit, revocation proceedings may be initiated subject to Section 21-84 of the Lake County Code. The Planning Commission may, in its discretion, approve time extensions.

2. The permittee shall permit the County of Lake or its representative(s) or designee(s) to make periodic inspections at any reasonable time deemed necessary in order to assure that the activity being performed under authority of this permit is in accordance with the terms and conditions prescribed herein. Applicant shall provide current access information and keys, key cards or other materials necessary for the agency staff with valid identification to gain access.

3. The Planning Commission may, during public hearing, modify or revoke this Use Permit any time during its term if it is determined that the use herein permitted is creating a nuisance or a condition hazardous or detrimental to the general public or to property in the vicinity of the use.

4. To provide adequate quantities of steam to the Bottle Rock Power Plant while minimizing impacts identified in the Supplemental EIR, this project shall follow a phased approach. Details for this approach shall be described in the supplemental **phasing plan** to be

submitted to the Community Development Department for review and approval sixty (60) days prior to pad, road or pipeline construction and approved prior to issuance of a grading permit. Project phasing shall incorporate the following general principles:

a. Development will occur in an orderly and rational manner while achieving both resource and environmental objectives.

b. Environmental impact such as surface disturbance erosion, sedimentation, drilling noise and dust emissions shall be minimized consistent with the Lake County Code and Air Quality Management District Rules.

c. Each individual phase of project development will be substantially completed prior to initiation of each subsequent phase.

d. Leasehold reservoir information if prepared by a reservoir engineer, geologist or other qualified professional and provided to the Community Development Department, may justify revisions in the phasing plan. All such information shall remain proprietary.

5. Days and hours of operation for facilities shall be twenty-four (24) hours per day, seven (7) days per week, except as specifically amended by conditions herein.

6. This Use Permit may be reviewed by the Planning Commission at the end of eighteen (18) months and every three (3) years thereafter, or as needed, and shall be subject to the following conditions:

7. No use, structure or development shall occur that is inconsistent with the approved plan of development or this use permit. The permit holder shall apply for a use permit modification if the permit holder proposes any construction inconsistent with this use permit and the approved plan of development.

The Community Development Director may approve minor amendments which are in substantial conformity with the uses and locations of uses approved by UP 85-27 when, in the opinion of the Community Development Director, such amendments will not result in any significant adverse environmental impacts.

All amendment requests shall be in writing and be approved, modified or denied by the Community Development Director in writing. The Director shall provide public notice of the proposed amendment to all property owners within 700 feet of the project property lines, as well as to the Planning Commission, at least two (2) weeks prior to any action or an amendment by the Community Development Director. Any dispute regarding the proposed amendment may be appealed to the Planning Commission by any person or the Community Development Director for a final determination.

A. TO PROTECT PLANT ASSOCIATIONS:

1. Each specific pad, road and borrow site steam line or other area of soil disturbance shall be evaluated by a landscape architect, registered forester, plant ecologist or other qualified person acceptable to the Community Development Department and permit holder, to select and program the re-establishment of ground cover and vegetation to include indigenous forage and habitat and provide maximum erosion control. A revised revegetation program shall be submitted to the Planning Department for review and approval, as described in condition *A.2.*of this permit.

2. Cut slopes on the road and pad areas shall be constructed as agreed upon by permit holder's engineers and the Community Development Department consistent with revised **revegetation** and **erosion/ sedimentation control plans** to be submitted for approval by the Community Development Department a minimum of fifteen (15) days prior to pad, road or pipeline construction and approved prior to issuance of a grading permit. Stepped benches shall be used where appropriate unless considered unnecessary by the person in A-1. Top soil shall be stock piled for later respreading over the

disturbed areas prior to reseeding as recommended by person A-I.

3. When each stage of road and pad construction has been completed in accordance with the approved **phasing plan,** the revegetation program developed in A-I shall commence, not later than the following fall. The revegetation program shall be directed by the landscape architect, registered forester, plant ecologist or other qualified person acceptable to the Community Development Department and permit holder.

4. The entire revegetation program shall be re-evaluated during the spring following initial planting and accompanied by a written statement from the qualified person listed in A-I, and provided to the Community Development Department. The written statement shall indicate which planting techniques were successful or unsuccessful, and what will be done to improve the revegetation program if needed. Photos shall be included to illustrate the relative success of revegetation efforts. This shall include photos taken prior to construction. If deemed by the Community Development Department to be unsuccessful, additional revegetation will be required not later than the immediately succeeding fall season. The revegetation program shall include periodic inspection and upgrading as necessary. This program shall provide for an accelerated revegetation effort to mitigate additional surface disturbance documented in the Supplemental EIR. All plantings shall be maintained or replanted for the life of the project.

   The revegetation and sediment control measures shall follow the recommended mitigation measures included in attachments 1 and 2 of this use permit.

5. Except for large stumps, vegetation removed during construction shall be chipped and re-spread when beneficial as determined by person in Section A-I, or burned under the permits required by the Lake County Air Quality Management District. Stumps may be buried outside of engineered fill and embankments.

6. Well discharge shall be directed away from adjacent woody vegetation and populated areas and appropriate energy dissipaters shall be used as required by the Lake County Air Quality Management District (LCAQMD).

7. In order to protect riparian and fen areas as well as other vegetation on the leasehold, access to the drill sites shall be restricted to existing roads and proposed roads as defined in the Plan of Development included in the Supplemental EIR (FINAL, dated June 1986) as amended by this use permit.

8. Vegetation within "fall-out" range of bleeding wells shall be assessed for damage or growth impedance by a plant pathologist or other qualified professional as approved by the Community Development Director and an annual report, together with photographs of selected sites, shall be submitted to Community Development Department. If damage to ecosystem is present, mitigation measures shall be enacted according to direction from the Community Development Department.

9. Vegetation beyond the construction perimeter shall not be disturbed. The clearing limits for the pad are in the Plan of Development.

B. TO PROTECT AGAINST EXCESSIVE SOIL EROSION, INDUCED LANDSLIDES AND SURFACE GEOLOGIC HAZARDS:

1. **Plans for drill pads, steam transmission pipelines, sumps and access road** shall be prepared by a registered Civil Engineer or other qualified professional. Topographic mapping by photogrammetric methods shall be used for design and be supplemented as necessary with ground surveys. Road, pipeline, and pad locations shall be staked on the ground and adjusted as

necessary before completion of final plans. Plans shall include a separate drainage plan using five foot contour intervals and supporting calculations for culvert sizes using acceptable engineering methods. Plans shall show specific provisions for erosion protection along pipeline routes, at culverts and on cut and fill slopes. Detailed specifications for construction should be prepared in a manner similar to applicable portions of "Forest Service General Provisions and Standard Specifications for Construction of Roads and Bridges-1977" and "Regional Standard Specifications", a U.S.D.A. Forest Service publication. Plans, specifications and ground locations shall be approved by the Community Development Department or their authorized representatives before starting construction, and shall also be approved by the Central Valley Regional Water Quality Control Board (CVRWQCB) prior to construction.

2. Drill pad and road fills shall be compacted to a minimum 95% relative compaction to minimize erosion. If significant erosion occurs as a result of any part of this project, permit holder shall take prompt remedial-action as directed by the Community Development Department. Tests indicating compaction results shall be submitted for approval to the Community Development Department within thirty (30) days of completion.

3. Filled slope banks shall not exceed a gradient of 2:1. Toes of all fills shall be stabilized with rock and gravel or keyed into stable soil and placed to reduce erosion potential to an absolute minimum on all fill slope banks. Revegetation of slopes shall be carried out as specified in Condition A. Unless approved by an engineering Geologist and the Community Development Department, cut slopes shall not exceed a gradient of 1-1/2:1.

4. Subdrains shall be provided under all fills where natural drainage courses and seepage are evident.

5. No drill pad construction or access road shall be allowed on potentially active landslides, unless properly mitigated, subject to approval by the Community Development Department.

6. Buffer zones of undisturbed vegetation shall be maintained to the maximum width possible on either side of streams, but in no case shall be less than the setbacks established by the Lake County Grading Ordinance from Class I, II and III streams. No geothermal related construction shall take place within this buffer zone unless consistent with the Plan of Development approved by the Lake County Planning Commission. Roads crossing riparian areas shall be minimum safe widths.

7. An impermeable retaining levee of not less than eighteen (18) inches in height and three (3) feet in base thickness, or an equivalent measure shall continue to be maintained in areas containing potentially hazardous materials, including equipment service, fuel transfer and drilling rig locations. Levees or equivalent measures shall be maintained to prevent spillage and/or storm runoff accumulation from random discharge. To minimize damage to levees from truck traffic, permit holder shall place ramps of rigid construction over levees. These ramps shall be in place immediately following completion of levee construction. Plans for new or replacement retaining levees or equivalent measures shall be designed by a licensed Civil Engineer and shall be submitted to the Community Development Department for review and approval prior to construction.

8. A revised **drainage plan** shall be submitted sixty (60) days prior, to pad, road or pipeline construction. Sediment catchment basins shall be in place prior to said construction. Said plan shall include sedimentation control strategies and shall indicate how runoff will be distributed and channeled to existing natural waterways, limiting an increase in water head and thereby avoiding unnatural channel abrasion. Energy dissipaters and collection devices to reduce the erosion force of unnatural runoff will be required where determined by county or state agency representative.

Sediment catchment basins and their locations shall be included in said plan. Their siting and design shall follow the recommended mitigation measures included as Attachment 2 of this use permit.

9. All grading activity and erosion prevention measures shall be completed and all drainage structures shall be in place and operational prior to October 10 of any year. New grading and excavation activity may not be permitted during the consecutive period from October 10 to April 10. (Extensions for short term grading activities beyond October 10 may be allowed by the Lake County Community Development Director in writing upon dry weather and establishment of a suitable soil moisture specification for any stated activity, consistent with the provisions of the Lake County Grading Ordinance.)

10. Applicant shall agree to contract with the County of Lake for engineering and inspection services, as required, to a completion date agreed upon by the permit holder and the county, to insure compliance with the above stated conditions.

11. In areas requiring removal of vegetation but no grading root crowns shall be left intact so as to retard soil erosion. Excavated materials shall not be sidecast or pushed over the edges during construction and final grading. Excess earthen materials (rocks, boulders and dirt) shall be removed from the site and disposed of in an approved disposal site. Cut and fill operations shall be carried out so that the down slope roll of rocks, boulders and/or earthen material is prevented.

C. SUMP/PAD CONSTRUCTION, OPERATION, MAINTENANCE & CLOSURE:

1. The sumps and pads shall be designed by a registered civil engineer, consistent with the recommendations of a registered engineering geologist. Design of the sump fill shall be to a specification to withstand both static loads and dynamic loads (imposed by credible seismic events) with safety factors of 1.5 and 1.3 respectively. The sump shall be constructed of material compacted to at least 95% relative (ASTM-D-1557-70), which may be reduced to 90% compaction if approved by the Central Valley Regional Water Quality Control Board (CVRWQCB) and Community Development Director, and demonstrated by soils reports as a hardship. If used for a period of eight (8) months or less, the sump shall be lined with at least two (2) feet of clay having permeability not to exceed 1 x 10 cm/sec or an equivalent impermeable membrane. If used for a period of between eight (8) and twelve (12) months, the sump shall be lined with at least three (3) feet of clay. Sumps used for more than one (1) year shall be double-lined with leachate collection systems as required by the CVRWQCB pursuant to Subchapter 15, Chapter 3, Title 23, California Administrative Code.

2. Until such time that the sumps have been removed in accordance with the Sump Closure Plan approved by the CVRWQCB in 2010, the sumps shall be operated in such a manner as to preclude overtopping of the sump. Three feet of freeboard shall be maintained at all times. Volume of the sump shall be sufficient to accommodate both the drilling mud and any reasonable amount of precipitation which could enter the sump. All sumps shall be equipped with measuring devices and alarms that indicate when freeboard level has been met. Pumps used to transfer drilling fluids between drill pads shall be equipped with low pressure alarms and flow/no-flow shut-off switches on all pressure lines. No transfer of drilling fluids between drill pads shall occur without prior approval of the Central Valley Regional Water Quality Control Board (CVRWQCB) and Lake County Health Department. Said transfer shall occur in rigid transfer piping meeting approved engineered standards. Transfer piping shall be pressure tested at least once per year. Testing shall occur prior to commencement of winter rains. Placement of drill mud or cuttings directly on the pad is prohibited unless specifically allowed in the approved DRAVO plan in condition C. 10. of this use permit, or an approved solids separation

system. Plans for this solids separation system shall be submitted thirty (30) days prior to the proposed use of said system, and fifteen (15) days thereafter. The solids separation system shall not be used prior to written approval of said plans by the Community Development Department. All future well drilling activities on the Francisco, Coleman and West Coleman pads shall be sumpless.

3. Applicant shall prepare a revised **contingency plan** for all spills including emergency pumping of the sump in the event of heavy, unexpected rainfall or if excessive geothermal fluids are encountered. The Plan shall show who is responsible and what equipment and manpower is available to respond to such an emergency, and shall be updated every six (6) months. Applicant shall maintain a current list of all surface water users downstream from Francisco Pad to Clear Lake. Said plan shall include the method of notifying surface water users and all responsible County and State agencies immediately following an emergency. The list is to be included as an attachment to the contingency plan. The plan shall be submitted for approval to the Lake County Planning Department within sixty (60) days of approval of the amended use permit. This plan shall be reviewed and revised, if necessary, every two (2) years and submitted to the Planning Department for approval.

4. Applicant shall prepare **a contingency plan for emergencies due to breaks or unexpected deformation of the pipeline or their supports**. The Plan shall show who is responsible and what equipment and manpower is available to respond to such an emergency. The plan shall be submitted to the Lake County Community Development Department prior to commencement or continuation of operations, and annually updated, if changes have occurred, on anniversary of permit.

5. The Francisco, Coleman, and West Coleman sumps shall be removed in accordance with the Sump Closure Plan approved by the CVRWQCB in 2010. All future drilling operations shall utilize sumpless drilling technology.

6. Prior to sump closure, removal or burial of sump materials or within thirty (30) days of the removal of drilling equipment, or as directed by the CVRWQCB, County or State Health Department Officials, sump fluids (both mud and supernatant liquids) shall be chemically analyzed for type and quantity of biologically sensitive materials, especially hazardous materials, heavy metals and acids unless waived in writing by the Community Development Director upon written consultation with the CVRWQCB.

   Sampling and testing parameters, and procedures shall be submitted to the Community Development Department for review and approval. Additional sump sampling, water quality monitoring and testing may be required if requested in writing by the Community Development Department, Lake County Health Department, or the CVRWQCB.

   Such testing shall be performed by a certified water quality testing laboratory. The chemical analysis shall be sent to the CVRWQCB and Lake County Health and Community Development Departments for review. If said analysis does not indicate quantities in excess of allowable limits for either human or other important biological elements, especially those of the aquatic ecosystem, then sump materials may be solidified, dried, mixed with native soil and buried in the sump. The location and disposal method of these materials shall be submitted for approval by the CVRWQCB and Lake County Health Department. If hazardous or biologically sensitive materials are found, such materials shall be removed within sixty (60) days to an off-site Class 1, Class II or equivalent waste management unit which is in compliance with all local, state and federal regulations, in a timely manner as directed by the county or appropriate state agency. All wastes shall be hauled in a securely containerized manner to prevent spilling of material.

7. No hydrocarbon base cleaning agent, no waste oils or greases, and no liquid fuel shall be released directly onto the surface, other than incidental leakage from equipment or accidental spills of 5 gallons or less within bermed areas of a drill pad. All such liquids shall be contained and removed from the site. Any accidental discharge of the materials mentioned above shall be removed and properly disposed of by the permit holder, and immediately reported to the Community Development and Health Departments.

8. If the sumps are used for a total time period longer than one year, it shall meet the requirements of Subchapter 15, Chapter 3, Title 23, California Administration Code. The permit holder shall immediately inform the County Health Department and CVRWQBC of this occurrence. If hazardous or biologically sensitive materials are present, and if directed by the County Health and Planning Departments or CVRWQBC, the permit holder shall remove sump materials, modify the sump and/or monitor groundwater consistent with Lake County and CVRWQBC permit conditions.

9. The permit holder shall ensure that any hazardous waste hauler under contract to the permit holder and operating on or off the leasehold is operating in compliance with all DOT Hazardous Waste Regulations, including placarding.

10. The DRAVO or an equivalent process may be installed and utilized on any drill site and liquid wastes may be transported from other drill sites on the leasehold to the selected DRAVO location(s) in accordance with condition C. 2. of this use permit. Plans and specifications shall be submitted to the Health and Community Development Departments for review and approval fifteen (15) days prior to installation of the facility.

11. If known hazardous materials are stored on site for more than thirty (30) days, the permit holder shall obtain a determination from the DOHS that the requirements of a Hazardous Waste Facility Permit have been satisfied.

12. All hazardous wastes are to be taken to a facility permitted by the California Department of Health Services to accept such wastes.

13. When sumps contain liquid or solid wastes, they shall be enclosed with field fence six (6) feet in height to prevent access by livestock, wildlife and unauthorized persons.

14. Pipeline components which may reach a temperature of 140 degrees Fahrenheit or higher, where accessible to human reach, shall be designed to prevent inadvertent human burn injury.

15. Sanitary and hand washing facilities shall be provided at each drill site during well drilling, in full compliance with all rules and regulations of the Lake County Health Department.

D. ACCESSORY ACTIVITIES

1. Accessory activities to the drilling and production of geothermal resources include drill pipe maintenance, steam line and valve fabrication, equipment maintenance, welding and materials storage, and other activities specifically related to drilling and production of geothermal resources.

2. The fenced area and enclosed steel building west of the control building shall be used for drilling and production materials storage. This fenced area shall not exceed 99,500 sq.ft. In addition, equipment maintenance, welding and steam line and valve repair is allowed. Welding may also be conducted on the gravel area east of the control building. Surface coverage shall not exceed 10,000 sq.ft.

3. Because most drill pipe straightening and hard banding will occur off the leasehold, only limited amounts of this activity shall occur. Drill pipe maintenance, hard banding and straightening is allowed within the bermed area of drill pads, and is limited to twenty-five (25) days per year, from 7:00 am to 7:00 pm daily.

4. When each well drilling sequence has been completed, permit holder shall remove all drilling equipment and clean pad within thirty (30) days, unless drilling of other wells in the pad is immediately scheduled to commence within forty-five (45) days. All drill pads not having drilling activities shall be kept clean and neat in appearance and shall not be used for equipment and materials storage.

E. TO PROTECT AGAINST SURFACE WATER DEGRADATION

1. In order to preserve the hydrologic integrity of this leaseholder area, permit holder shall legally obtain by right, purchase or agreement all water used in the drilling process, dust control or steam production, and provide supporting documentation to the Community Development Department. If possible, all water used for this project shall be obtained from leaseholder water wells. Prior to using surface waters for this project, the permit holder shall provide verification that well water is not available or not sufficient for project needs.

2. All areas on each pad containing potentially hazardous materials, including the equipment service and fuel transfer areas and the area occupied by the drilling rig, shall drain to the sumps, or upon closure of the sumps to a drainage catchment basin approved by the CVRWQCB and the Community Development Department. No sump materials shall be allowed on the pad unless they are in compliance with the conditions of the approved DRAVO Plan identified in C. 10, or the solids separation system discussed in C.2 of this use permit.

   All other areas with equipment service, fuel transfer, or potentially hazardous materials shall be compacted to 95% and be bermed as described in condition B.7 of this use permit. It is understood that spraying of hydrocarbon based fluids or application of solvents or other potentially hazardous materials shall not be conducted in the storage and welding areas adjacent to the control building and identified on the approved plan of development. If violations of this condition occur, impermeable catch basins and more extensive berming shall be required to protect water quality in the unnamed tributary (Cow Creek) of High Valley Creek.

3. Permit holder shall monitor or contract to monitor water quality in compliance with all CVRWQCB requirements, and aquatic biology in unnamed tributary (Cow Creek) of High Valley Creek in the vicinity of the Francisco pad expansion. Type, location and frequency of testing shall be determined by the Community Development and Health Departments in consultation with CVRWQCB. Said monitoring proposal shall be submitted and approved by the Community Development and Health Departments prior to issuance of a grading permit for pad construction. The permit holder shall coordinate water monitoring activities with the Department of Water Resources.

4. If the permit holder elects to conduct or participate in a watershed or regional water quality monitoring program, it can be substituted for the requirements of E.3. Such a proposal must be submitted to and accepted by the Community Development and Health Departments in consultation with CVRWQCB prior to termination of the monitoring outline in E.3.

5. In addition to the periodic water monitoring discussed in E.3 above, permit holder shall conduct a continuous water quality monitoring program similar to that identified in Attachment 3 of this use permit. Plans and locations for this continuous water quality monitoring program shall be submitted to and

approved by the Lake County Community Development and Health Departments prior to pad, road, or pipeline construction. Specific design for this program shall be approved by the Community Development and Health Departments in consultation with CVRWQCB, and shall be operational prior to well drilling on new or expanded drill pads.

The permit holder is encouraged to cooperate with other area developers to implement this continuous water quality program in a cost effective manner.

6. The injection of water from on or off site surfaces or groundwater sources is prohibited except for rainwater and other sump fluids, and steam condensate. The injection of wastewater shall be subject to approval by the County Health Department.

7. Applicant shall comply with all provisions of the waste discharge requirements approved by the CVRWQCB and all other state laws and regulations pertaining to waste hauling and water quality.

F. TO PROTECT AIR QUALITY:

1. Applicant shall meet all regulations and standards set by the Lake County Air Quality Management District (LAQMD) and utilize on a continuous basis the state of the art of H_2S technology. All conditions of the LAQMD Authority to Construct and Permit to Operate are herein referenced and made part of this use permit. This use permit does not supersede the authority of said District in anyway.

2. After completion of geothermal wells, the H_2S emissions during standby venting of steam shall be either abated to an acceptable level per Air Quality Management District rules and regulations or standby venting shall be curtailed to the level necessary to attain emission limitations. Curtailment methods to be utilized shall include the shutting in of geothermal wells in accordance with established procedures.

3. Permit holder shall minimize vehicular dust on unpaved roads and drill pads during construction and operation by the use of water or other acceptable dust suppressant or palliative approved by LCAQMD.

4. Permit holder shall provide accurate chemical analysis of the geothermal resource if it is encountered, when required by the Lake County Air Quality Management District.

5. The analysis shall include accurate "wet chemistry" and gas chromatograph determinations as referred to in the LCAQMD permits. Heavy metals such as lead, chromium, arsenic, mercury and cadmium should be determined as well as substances such as radon, hydrogen sulfide, boron, manganese, methane, fluoride, ammonia and carbon dioxide. The analysis should also include pH.

6. Permit holder shall enter into agreements with Department of Water Resources or other parties as necessary and provide a written commitment and preliminary design of abatement systems as described in the LCAQMD modified Determination of Compliance dated February 2, 1982.

G. TO PROTECT AGAINST NOISE EXPOSURE:

1. The permit holder shall not exceed a maximum noise standard of Ldn 50 dBA at residential receptors. The permit holder shall design project components to minimize noise emissions generally consistent with the best available control technology (BACT) as described on pages 222-228 of the Union Oil Unit 21 Steam field Use Permit No. UP 83-41 and the recommended mitigation measures identified in the Supplemental EIR and included in this use permit as Attachment 4. The Noise Control Officer shall determine BACT for each

drill site consistent with the Lake County General Plan and the project EIR.

2. If measurements by the Community Development Department indicate a possible violation of G.1, a measurement of the source noise in an appropriate location in the immediate vicinity of the source may be made to determine if the source noise is sufficient to cause the level measured at G.1 to exceed 50 dBA Ldn using the inverse square law.

3. These regulations shall be adopted until a noise control ordinance is approved by the Board of Supervisors. Applicant agrees that the Planning Commission shall have the right to substitute the conditions of a general noise control ordinance for the conditions of this section when adopted by the Board of Supervisors. It is understood by the Planning Commission and permit holder that mufflers of advance design will be required for pertinent geothermal operations in order to meet these standards and that extraordinary mitigative techniques such as lead/vinyl barriers and the wrapping of the drill rig platforms may be necessary to meet the noise standards of Section G-l and G-2.

4. It is stipulated that the Community Development Department will be spot monitoring noise levels in the vicinity of the proposed land use and that findings resulting from said monitoring may require the permit holder, his contractors or agents to provide continuous noise level monitoring and readings as may be directed by the Community Development Department. Noise problems such as brake squeal, low level engine rumble, etc., substantiated by public complaints may result in the Community Development Department imposing more stringent noise control techniques upon permit holder such as the use of hospital grade mufflers on generators and air compressors, extensive use of noise barriers and enclosure of all noise generating equipment in a "super pad" concept as described in the Final EIR (dated June 1986). It is the permit holders' intent to address low level and persistent noises associated with large diesel engines in the specific plan required in condition G.8.3 of this use permit.

5. It is also stipulated that the Community Development Department has jurisdiction over noise investigation procedures and enforcement.

6. The permit holder shall, except in cases of verified emergency or unforeseen unusual need, schedule delivery of supplies and travel by large vehicles through High Valley Road to the hours of 7:00 a.m. to 7:00 p.m. ***Monday through Friday.*** The use of ~~leasehold roads~~ ***High Valley Road between Bottle Rock Road and the Francisco Lease boundary*** by heavy vehicles or equipment shall be ~~strongly discouraged~~ ***prohibited*** on Saturdays, Sundays, all legal holidays, and during school bus hours, except in verified emergency or unforeseen unusual need. For the purposes of this permit unforeseen unusual need is defined as well repair or new drilling operations within the Francisco leasehold that once started, cannot be stopped until completed, and which require resupply of materials or equipment that cannot otherwise be staged during weekdays. ***In cases where weekend commercial truck traffic may be necessary due to unforeseen unusual need, the permit holder shall notify the Community Development Department a minimum of 24 hours in advance with reasons for the weekend delivery. An email list of High Valley Road residents shall be maintained by the Community Development Department and residents shall be notified when weekend truck traffic is authorized. If it is not possible to provide 24 hour advanced notification, the permit holder shall distribute an email to the High Valley Road residents and the Community Development Department that describes the reason for the weekend commercial truck traffic, estimated time that the delivery will occur, and number of trucks expected.***

The hours of large truck traffic, defined as vehicles over one (1) ton capacity, shall be restricted to the hours from 7:00 a.m. to 7:00 p.m., except when

setting casing and in cases of verified emergency or unforeseen unusual need. An emergency is defined for the purpose of this permit as a spill, accident, imminent loss of equipment or other unforeseen event requiring immediate action to protect public health, safety or welfare. All such emergencies shall be reported to the Community Development Department as soon as possible and in no case more than one hour after occurrence.

7. Drill pipes shall not be laid in bins between the hours of 7 p.m. and 7 a.m. the following day.

8. The permit holder shall prepare or cause to be prepared a revised leasehold noise control plan based on the best available control technology. Said plan shall emphasize preventative rather than reactive noise abatement techniques as recommended in the Supplemental EIR and included in this use permit as attachment 4. This plan shall provide flexibility to allow for special circumstances which may develop as a result of problems related to borehole geology, lost drilling tools, fishing events and unanticipated large steam entries. These special circumstances and abatement strategies shall be described in the noise control plan. The permit holder shall implement the noise mitigation measures approved by the Community Development Department. The noise control plan shall be submitted no less than thirty (30) days in advance of any additional pad construction or drilling, and fifteen (15) days thereafter, and approved by the Community Development Department prior to construction or well drilling on any new or expanded pads.

   Specific noise control plans shall be submitted and approved for the following project stages, and reviewed every two years at a minimum:

   1) Drilling on Coleman and Francisco pad extension.

   2) Road and pad construction.

   3) Each drilling operation. Plans shall be submitted no less than fourteen (14) days prior to commencement of drilling.

   4) Operational Plan Update.

9. The use of truck engine brakes on High Valley Road shall be prohibited except in cases of brake fade or failure where the use of an engine brake is necessary for safety.

H. TO PROTECT ARCHAEOLOGICAL RESOURCES:

1. Archaeological sites identified on pages 125-127 of the McCulloch Department of Water Resources Bottlerock Steamfield EIR shall be preserved in their existing state. No excavation or disturbance by the permit holder or his contractors shall be permitted at these archaeological sites unless mitigated, subject to approval by the Community Development Department and Sonoma State University's Resources Facility.

I. TO CONTROL VISUAL IMPACTS:

1. A program of long-term site project maintenance shall be developed and implemented by the permit holder to ensure continued performance of project components. To achieve this goal, permit holder shall submit to the Community Development Department for approval a **scenic enhancement plan** to include the following project components: 1) landscape plans for the control building, parking lot, storage and welding areas; 2) locations for temporary storage of equipment and material on pads during times of drilling and construction 3) screening of the storage area west of the control building shall include landscaping and wood slats in fencing. Screening of the welding area east of the control building shall include a redwood perimeter fence at

least six feet in height. All equipment not specifically used for drilling activities shall be stored within the fenced area immediately west of the control building. This plan shall be submitted within ninety (90) days of approval of this use permit and shall be approved prior to additional well drilling or pad construction.

2. Pipelines shall be colored to provide maximum color compatibility with, the vegetation type through which it is routed. Pipeline color shall be the same as existing pipelines in the leasehold unless otherwise approved by the Community Development Director.

3. On visual edges such as ridgelines, low profile design shall be employed. In such cases, expansion loops shall be laid horizontally, not vertically.

4. All pad, road, and pipeline sites shall utilize existing vegetation and topography to maximize visual screening where feasible.

5. All lights shall be shielded or directed away from adjacent residential or populated areas and consistent with OSHA and FAA requirements. Lighting plans, including shielding methods, light placement, etc., shall he submitted to the Community Development Department for review and approval thirty (30) days to new pad construction or expansion. Visual impacts shall be minimized at night at residences and to the portion of Bottlerock Road from which the drilling mast is visible.

J. UPON WELL ABANDONMENT:

1. The permit holder shall abandon any well in accord with the California Division of Oil, Gas and Geothermal Resources regulations.

2. Permit holder shall refill sump and grade pad to reasonably restore a natural ground contour, unless an alternative is approved by the Community Development Department in consultation with the property owner and the CVRWQCB.

3. Permit holder shall remove all pipelines and supports not necessary for field operation.

4. Permit holder shall revegetate the pad, sump and all graded areas with native grasses and woody vegetation that can be tolerantly sustained in accord with recommendations of the re-vegetation consultant or the procedure in Condition A.1.

5. The permit holder shall submit a reclamation plan at the time of abandonment of any project facility for review and approval by the Community Development Director, including re-vegetation, grading, drainage and maintenance plans.

K. RE-ENTRY OF PRODUCTION OR SUSPENDED WELL BORES:

1. Applicant may re-drill or otherwise re-enter the same well bore of any of the twenty-seven (27) wells authorized under this use permit during the life of this permit as long as all conditions of the use permit are met.

L. SEVERABILITY:

1. If any section, subsection, sentence, clause or phrase of this permit is for any reason held by a court of competent jurisdiction to be invalid, such decision shall not affect the validity of the remaining portions of the use permit. The Board of Supervisors hereby declares that it would have passed this use permit and each section, subsection, sentence, clause and phrase hereof irrespective

of the fact that any one or more sections, subsections, clauses or phrases are declared invalid.

M. PUBLIC HEALTH AND SAFETY:

1. In the event of casing blowout or other uncontrolled venting, the permit holder shall move immediately to control the vent. No more than 24 hours shall elapse from the date of the uncontrolled vent to the date of equipment relocation to secure it.

2. Applicant shall comply with the requirements of the fire prevention practices and measures as prescribed by Cal Fire and/or County of Lake. An emergency response contingency plan shall be submitted for approval by the Community Development Department. Fire access maps indicating streets and signing shall be provided to the appropriate fire district(s).

3. All extra-wide and slow moving vehicles shall be preceded by a flag car while on public roadways. All hazardous waste generated on site shall be shipped in accordance with all state and federal regulations, and all necessary permits or approvals shall be obtained from CHP (California Highway Patrol).

   Prior to entering the security gate onto high valley road, the permit holder shall provide all truck drivers with a detailed map of the area in which they are traversing. Alternatively, a site map shall be distributed by the permit holder with each service agreement issued to vendors who will be performing work on the leasehold The map should include: a) all dangerous curves/elevation points--highlighted in red, b) speed limits/reduced limits depicted on the map, c) safe locations for vehicle inspections, and d) a serious warning clause/penalties if drivers violate any safety procedures while travelling on private roads.

   The permit holder shall provide a vehicle inspection area on the Francisco leasehold and designate it as the location for truck drivers to conduct their DOT-required vehicle safety inspections. The inspection shall include brakes, vehicle connection, wheels/tires, valves, tanks, etc. and other equipment as outlined in Title 13 CAC. After loading, a material inspection for leaks in the system shall be conducted. The permit holder shall also provide log-in sheets at the designated inspection area for truck drivers to complete, acknowledging the date and time that they conducted their vehicle safety inspections.

4. The permit holder shall be responsible for repair of any direct verifiable damage to public roadways resulting from construction or operation of this project, including actions by contractors or subcontractors.

5. Sanitary and hand washing facilities shall be provided at each drill site during well drilling, in full compliance with all rules and regulations of the Lake County Health Department.

6. The permit holder shall comply with all safety requirements of Cal/OSHA, including an accident prevention program, and conduct Cal/OSHA on-site worker safety inspections during construction and operation of the steamfield.

7. The permit holder shall surface all project roads with a double chip seal surface, or equivalent surface approved by the Community Development Department. Surfacing shall commence upon initiation of pad, road or pipeline construction and shall be completed within 3 years as specifically provided for in the required **phasing plan.** Inspection costs for this surfacing shall be paid in accordance with condition B.10 of this use permit. These roads and road drainage improvements shall be maintained throughout the life of the project.

8. Applicant shall maintain files on all supplemental plans and ongoing mitigation measures required by this Use Permit. An annual report summarizing the primary compliance activities during the previous year shall be submitted to the Community Development Department.

9. Applicant shall enter into a compliance monitoring inspection agreement with the County of Lake. Said agreement shall provide for reimbursement to the County for the actual cost of inspection and monitoring, limited to staff time, equipment repair, and mileage, for the life of the project. If an area-wide fee schedule for inspection services is adopted in the future, it shall replace this condition.

10. The permit holder agrees that the Lake County Planning Commission shall have the right to require the permit holder to participate in a Geysers area seismic monitoring program on a pro rata basis, if recommended by the Lake County General Plan.

11. Provision shall be made for adequate access by firefighting equipment to the site, and fire access maps shall be provided to the appropriate fire district(s).

12. Permit holder shall provide the Lake County Air Quality Management District with a venting plan which details the equipment and procedures which will be employed during power plant outages (stacking periods) and during maintenance venting. This plan shall include proposed hours during which planned maintenance venting will occur as well as projected time which will elapse between unscheduled power plant outages and the throttling back of wells to minimum bleed. The plan shall include personnel available for unscheduled outages and projected response time of those personnel.

13. Permit holder shall submit a revised traffic control and road maintenance plan for High Valley Road. This plan shall require car pooling and/or bussing of employees whenever possible and take into account the great increase in heavy truck traffic which will accompany full field development and expansion of the Bottlerock site. The plan shall also address sign requirements and the coordination of heavy truck traffic (on Sulphur Creek Road) with the school district to reduce safety concerns to school children. The plan shall suggest mitigations which will prevent or alleviate the concomitant increase in danger due to traffic accidents and damage to the road which may occur following development. This plan shall be approved prior to issuance of a grading permit for pad; road, or pipeline construction.

14. Pipeline routes and design must be consistent with the approved plan of development, and be approved by the Community Development Department prior to construction.

15. All supplemental plans required by this permit, including but not limited to re-vegetation, sediment, drainage monitoring and control, scenic enhancement, phasing, continuous water monitoring, traffic control and maintenance, noise abatement, emergency fire and medical evacuation and accidental spills, shall be incorporated into the use permit once approved by the responsible department or official. Public notice of all plans and reports shall be provided to all property owners within 700 feet of the project property lines, as well as to the Planning Commission, at least two (2) weeks prior to any action. Any dispute regarding the adequacy of those plans may be appealed by any person to the Planning Commission for a final determination.

16. A financial assurance agreement, certificate of deposit or bond, satisfactory in form and content to the Lake County Counsel, shall be provided and maintained by the permit holder to insure cleanup in case of spills, landslides, mishaps and site reclamation upon abandonment. Said financial agreement shall make available up to $350,000.00 (to be adjusted every two (2) years in accordance with the San Francisco Area Consumer Price Index) for this purpose and shall be payable to the County of Lake and require County

approval to terminate.

II. IN GRANTING THIS USE PERMIT, THE LAKE COUNTY PLANNING COMMISSION MAKES THE FOLLOWING FINDINGS:

A. That this use permit does not abridge or supersede the regulatory powers or permit requirements of any state or federal agency of any special district or other Lake County department or division which may retain an advisory or regulatory function as specified by statute or ordinance, nor does this use permit grant any title or other real property solely to this permit holder or his assigns.

B. That the granting of this use permit is in the general public interest and that environmental and performance parameters conditioning the proposed activity as specified in this use permit and as contained in the document entitled "Conditions, Procedures and Performance Standards for Geothermal Regulations, County of Lake," now referenced and made a part hereof, will allow the proposed activity with adequate safeguards to the welfare of the people of Lake County at large and to the people residing in the vicinity of said activity.

C. The revised noise standard of Ldn 50 dBA will reduce the likelihood of disturbances to residents in the project area.

D. Installation of alarms and rigid transfer piping, continuous water quality monitoring, and implementation of a revised contingency spill plan will reduce the likelihood of water quality degradation and further protect public health.

E. Erosion control, sediment/drainage control, re-vegetation, scenic enhancement, project phasing, spill protection, traffic control and road maintenance measures have been adequately addressed by permit conditions and supplemental plans which shall be incorporated into this permit.

F. Air quality standards have not been lowered and the EIC abatement system has been replaced by equivalent air pollution control measures as required by the Lake County Air Quality Management District.

G. The permit holder agrees to comply with recommended mitigation measures from the Supplemental EIR as stated in Attachment 5 of the staff report dated July 20, 1982, mitigations from Supplemental EIR dated December 20, 1982, mitigations from Supplemental EIR dated December 1985 and June 1986, and included as attachments 1 through 4, and use permit revisions dated June 26, 1986.

H. This use permit is consistent with the Lake County General Plan.

I. The financial assurance agreement for spills, landslides, mishaps and site restoration required by this use permit will insure that clean up occurs in a safe and expeditious manner.

J. The permit compliance monitoring agreement required by this use permit will provide for reimbursement of costs incurred by County staff.

K. Implementation of project phasing and scenic enhancement plans will provide for orderly and rational resource development, while minimizing surface disturbance and environmental impacts.

L. The unavoidable adverse impacts from this project that were lessened but not completely avoided are overridden by the desirability to develop the geothermal resource for energy supplies, the additional revenue accruing to Lake County through utilization of this natural resource, and the creation of new jobs during construction and operation of the steamfield.

III. THE PLANNING COMMISSION FURTHER DECLARES THAT:

1. This use permit may be modified or revoked if the Lake County Planning Commission finds that the use to which this permit is put is detrimental to the health, safety, morals, comfort and general welfare of the persons residing or working in the neighborhood of such use, or if it is injurious or detrimental to property and improvements in the neighborhood or to the general welfare of the county, or is a nuisance.

Date of Expiration: June 26, 2013

Date of Issuance: July 22, 1986

Date of Modification: February 13, 2011

Richard J. Coel
Community Development Director

By: Danae Bowen
Danae Bowen, Office Assistant III

ACCEPTANCE

I have read and understood the foregoing use permit and agree to each and every term and condition thereof.

Date: 1/13/12

Bill Harris
Applicant or Authorized Agent

COUNTY OF LAKE

USE PERMIT 09-01

BRP GEORESOURCE STEAMFIELD PROJECT

Pursuant to the approval of the Lake County Planning Commission on January 13, 2011, and as amended by the Lake County Board of Supervisors on March 15, 2011 there is hereby granted to Bottle Rock Power, LLC, P.O. Box 326 Cobb, CA 95426, a Use Permit for the construction of a geothermal steamfield including two well pads and up to twenty-two (22) geothermal development wells. Up to eleven (11) geothermal wells per pad may be constructed during the life of this project. Up to twenty-two (22) redrilling of well bores in new directions and/or replacement wells and unlimited rework of the 22 wells is also authorized. This project approval also includes associated support equipment necessary for geothermal field operations including but not limited to steam and condensate pipelines, sediment catchment basins, water monitoring facilities, access roads, and reinjection wells, along with incidental uses and activities; further described in the conditions of this use permit and identified in the project description and site plan contained within the Final EIR Certified for this project. The project is located at 6743, 6825, 7358, 7385 and 7500 High Valley Road identified as Lake County Assessors parcel numbers 011-012-97 and 013-002-01, 03, 04 & 05, within the BRP GeoResource Leasehold and the Francisco Leasehold.

The Planning Commission finds that the establishment and maintenance or operation of the use for which application is made will not, under the circumstances of this particular case, be detrimental to the health, safety, peace, morals, comfort and general welfare of persons residing or working in the neighborhood of such use, or be detrimental to the general welfare of the County.

The permit holder attests to having obtained all necessary easement rights.

The Planning Commission has caused to be prepared an Environmental Impact Report on the subject of this application and has held public hearings thereon and has carefully considered this matter pursuant to the California Environmental Quality Act and the State CEQA Guidelines pertaining thereto, and pursuant to the Environmental Protection Guidelines of the County of Lake.

THIS APPROVAL IS SUBJECT TO ALL REQUIREMENTS OF THE ATTACHED MITIGATION MONITORING AND REPORTING PROGRAM (Attachment A) AND THE FOLLOWING TERMS AND CONDITIONS:

A. GENERAL

1. Days and hours of operation for facilities shall be twenty-four (24) hours per day, seven (7) days per week, except as specifically amended by conditions herein.

2. No use, structure or development shall occur that is inconsistent with the approved project description and Project Alternative 3 of the Environmental Impact Report Certified by the Planning Commission on December 22, 2010, or with this use permit. The permit holder shall apply for a use permit modification if the permit holder proposes any construction inconsistent with this use permit and the approved plan of development.

3. This use permit approval shall not become effective, operative, vested or final until the California Department of Fish and Game filing fee required or authorized by Section 711.4 of the Fish and Game Code is submitted. Said fee shall be paid within 30 days of project approval (checks to be made payable to the County of Lake).

4. Prior to this use permit having any force or effect, the permit holder shall sign and file with the Lake County Community Development Department an indemnity agreement approved by the County Counsel.

5. No new construction in reliance upon this use permit shall be authorized until the rezoning application has been approved by the Lake County Board of Supervisors to rezone the 60-acre project area from "PDR-BF" to "RL-BF", pursuant to rezone application RZ 09-07.

6. The permit holder agrees to work with the County in the future during any discussions with PG&E concerning potential local benefits from electricity generated at this site.

7. The permit holder agrees to enter into an agreement with the Lake County Watershed Protection District prior to commencement of drilling operations and contribute 50% of costs for the Kelsey Creek flow gauges ($6,000 per year, adjusted at 90% of CPI for US cities) and contribute $11,000 per year to pay for operations and maintenance of the Kelsey Creek Detention Structure (adjusted at 90% of CPI for US cities).

B. TIMING, MITIGATION AND MONITORING, SEVERABILITY

1. The permit holder shall enter into a mitigation monitoring inspection agreement with the County of Lake. This agreement shall provide for reimbursement to the County for the actual cost of inspection and monitoring, limited to staff time and mileage, for the life of the project.

2. The permit holder shall permit the County of Lake or its representative(s) or designee(s) to make periodic inspections at any reasonable time deemed necessary in order to assure that the activity being performed under authority of this permit is in accordance with the terms and conditions prescribed herein.

3. The permit holder shall maintain files on all supplemental plans and ongoing mitigation measures required by this Use Permit. An annual report summarizing the primary compliance activities during the previous year shall be submitted to the Community Development Department by August 30th of each year.

4. The Planning Commission may modify or revoke the use permit in the future if the Commission finds that the uses to which the permit is put is detrimental to the health, safety, comfort and welfare of the public, or results in a nuisance, or if one or more of the conditions is violated.

5. The Community Development Director may approve minor modifications in writing, which are in substantial conformity with the uses and locations of uses approved by UP 09-01 when, in the opinion of the Community Development Director, such amendments will not result in any significant adverse environmental impacts. All amendment requests shall be in writing and be approved, modified or denied by the Community Development Director in writing. The Director shall provide public notice of the proposed amendment to all property owners within 700 feet of the project property lines at least two (2) weeks prior to any action or an amendment by the Community Development Director. Any dispute regarding the proposed amendment may be appealed to the Planning Commission, or the Director may choose to forward the proposal to the Planning Commission for consideration.

6. The Use Permit shall be valid until December 22, 2040. The Planning Commission may, in its discretion, approve time extensions.

7. The use permit shall be null and void if not vested by December 22, 2012, or if the uses are abandoned for a period of two (2) years.

8. If any section, subsection, sentence, clause or phrase of this permit is for any reason held by a court of competent jurisdiction to be invalid, such decision shall not affect the validity of the remaining portions of the use permit. The Board of Supervisors hereby declares that it would have passed this use permit and each section, subsection, sentence, clause and phrase hereof irrespective of the fact that any one or more sections, subsections, clauses or phrases are declared invalid.

C. BIOLOGICAL RESOURCES:

1. Both well pads, the road, topsoil stockpile sites, steam pipeline and other area of soil disturbance shall be evaluated by a landscape architect, registered forester, plant ecologist or other qualified person acceptable to the Community Development Department and permit holder, to select and program the re-establishment of ground cover and vegetation to include indigenous forage and habitat and provide maximum erosion control.

2. Prior to issuance of grading permits for well pad, service road and pipeline construction, a revegetation plan prepared by a qualified biologist or other qualified professional shall be submitted to the Community Development Department for review and approval. The plan shall be re-evaluated by a qualified biologist during the spring following initial planting, and a report prepared and submitted to the Community Development Department. The report shall indicate which planting techniques were successful or unsuccessful, and what will be done to improve the revegetation program if needed. If deemed by the Community Development Department to be unsuccessful, additional revegetation will be required not later than the immediately succeeding fall season. The revegetation program shall include periodic inspection and upgrading as necessary. All plantings shall be maintained or replanted for the life of the project.

3. Except for large stumps, vegetation removed during construction shall be chipped and re-spread when beneficial as determined by person specified in condition C.1, or burned under the permits required by the Lake County Air Quality Management District. Stumps may be buried outside of engineered fill and embankments.

4. Well discharge shall be directed away from adjacent woody vegetation and populated areas and appropriate energy dissipaters shall be used as required by the Lake County Air Quality Management District (LCAQMD).

5. Access to the well pads shall be restricted to existing roads and proposed roads as defined in the project description and approved site plan included in the Final EIR.

6. Disturbance of vegetation beyond the approved construction perimeter is prohibited.

D. SOIL EROSION, INDUCED LANDSLIDES AND SURFACE GEOLOGIC HAZARDS:

1. Prior to issuance of permits for earthwork related to this project, financial assurance shall be submitted to the Community Development Department to be used in the event that the permit holder is unable to complete the earthwork. In projecting the costs of financial assurances, it shall be assumed, without prejudice or insinuation, that the project could be abandoned by the permit holder and, consequently, the County may need to contract with a third party commercial company for rehabilitation of the site. Rehabilitation shall include the combined process of land treatment and revegetation that minimizes water degradation, air pollution, damage to wildlife habitat, flooding, erosion, and other adverse effects from earthwork, so that the land would not be a danger to public health or safety. The amount of the financial assurances shall be based on the estimated costs of rehabilitation. Cost estimates shall be prepared by a California-registered professional engineer and/or other similarly licensed and qualified professional retained by the permit holder and approved by the Community Development Department. The estimated amount of the financial assurances shall be based on an analysis of physical activities necessary to implement rehabilitation, the unit costs for each of these activities, the number of units of each of these activities, and the actual administrative costs. The analysis shall include cost estimates for labor, equipment, materials, mobilization of equipment, administration, and reasonable profit by a commercial operator. Additionally, a contingency factor of ten (10) percent shall be added to the cost of financial assurances. The permit holder may provide security in the form of a surety bond, trust fund, irrevocable letter of credit from an accredited financial institution, or other method acceptable to the County. These financial assurances shall remain in effect until all earthwork is completed to the satisfaction of the Community Development Department.

2. Plans for drill pads, steam transmission pipelines, and access road shall be prepared by a registered Civil Engineer or other qualified professional. Road, pipeline, and pad locations including cut and fill edges shall be staked on the ground and adjusted as necessary for review and approval by the Community Development Department prior to start of construction. Plans shall include a separate drainage plans and supporting calculations for culvert sizes using acceptable engineering methods. Plans shall show specific provisions for erosion protection along pipeline routes, at culverts, roads and on cut and fill slopes. Sediment catchment basins and their locations shall be included in said plans. Plans, specifications and ground locations shall also be made available for review and approval by the Central Valley Regional Water Quality Control Board (CVRWQCB) prior to construction.

3. Drill pad and road fills shall be compacted to a minimum 90% relative compaction to minimize erosion. If significant erosion occurs as a result of any part of this project, permit holder shall take prompt remedial-action as directed by the Community Development Department. Tests indicating compaction results shall be submitted for approval to the Community Development Department within thirty (30) days of completion.

4. Engineered filled slope banks shall not exceed a gradient of 1-1/2:1. Toes of all fills shall be stabilized with rock and gravel or keyed into stable soil and placed to reduce erosion potential to an absolute minimum on all fill slope banks. Revegetation of slopes shall be carried out as specified in Condition A. unless approved by a Registered Civil Engineer or Geotechnical Engineer and the Community Development Department, cut slopes shall not exceed a gradient of 1-1/2:1.

5. Subdrains shall be provided under all fills where natural drainage courses and seepage are evident, subject to design by a registered Civil Engineer.

6. Prior to earthmoving activities, a grading permit shall be obtained from the Building and Safety Division of the Community Development Department. No grading or vegetation clearing is allowed until a grading permit is obtained. Engineered plans shall be submitted detailing the service road construction and erosion and sediment control measures. Prior to the issuance of the grading permit, the Building Division may require further modifications of the approved plans to insure that the project is consistent with the Lake County Grading Ordinance.

7. No drill pad construction or access road shall be allowed on potentially active landslides, unless properly mitigated, subject to approval by the Community Development Department.

8. Buffer zones of undisturbed vegetation shall be maintained to the maximum width possible on either side of streams, but in no case shall be less than the setbacks established by the Lake County Grading Ordinance from Class I, II and III streams. No geothermal related construction shall take place within this buffer zone unless consistent with the approved project description and site plan. Roads crossing riparian areas shall be minimum safe widths.

9. All grading activity and erosion prevention measures shall be completed and all drainage structures shall be in place and operational prior to October 15 of any year. New grading and excavation activity may not be permitted during the consecutive period from October 15 to April 15. (Extensions for short term grading activities beyond October 15 may be allowed by the Lake County Community Development Director in writing upon dry weather and establishment of a suitable soil moisture specification for any stated activity, consistent with the provisions of the Lake County Grading Ordinance.)

10. In areas requiring removal of vegetation but no grading, root crowns shall be left intact so as to retard soil erosion. Excavated materials shall not be sidecast or pushed over the edges during construction and final grading. Excess earthen materials (rocks, boulders and dirt) shall be removed from the site and disposed of in an approved disposal site. Cut and fill operations shall be carried out so that the down slope roll of rocks, boulders and/or earthen material is prevented.

E. PAD CONSTRUCTION, OPERATION, MAINTENANCE & CLOSURE:

1. The pads shall be designed by a Registered Civil Engineer, consistent with the recommendations of a Geotechnical Engineer.

2. All drilling operations on the BRP GeoResource Leasehold shall utilize sumpless drilling technology. Sumps are not authorized for use by this use permit.

3. Applicant shall prepare a contingency plan for emergencies due to breaks or unexpected deformation of the pipeline or their supports. The Plan shall show who is responsible and what equipment and manpower is available to respond to such an emergency. The plan shall be submitted to the Lake County Community Development Department prior to completion of the first geothermal well. Any updates made to the contingency plan shall be submitted to the Community Development Department within sixty (60) days for review and approval.

4. No hydrocarbon base cleaning agent, no waste oils or greases, and no liquid fuel shall be released directly onto the surface, other than incidental leakage from equipment or accidental spills within bermed areas of a drill pad. All such liquids shall be contained and removed from the site. Any accidental discharge of the materials mentioned above shall be removed and properly disposed of by the permit holder, and immediately reported to the Community Development and Environmental Health Departments.

5. The permit holder shall ensure that any hazardous waste haulers under contract to the permit holder and operating on or off the leasehold is operating in compliance with all DOT Hazardous Waste Regulations, including placarding.

6. If known hazardous materials are stored on site for more than thirty (30) days, the permit holder shall obtain a determination from the DOHS that the requirements of a Hazardous Waste Facility Permit have been satisfied.

7. All hazardous wastes are to be taken to a facility permitted by the California Department of Health Services to accept such wastes.

8. Pipeline components which may reach a temperature of 140 degrees Fahrenheit or higher, where accessible to human reach, shall be designed and constructed to prevent inadvertent human burn injury.

F. ACCESSORY ACTIVITIES

1. Drill pipe maintenance, steam line and valve fabrication, equipment maintenance, welding and materials storage, and other activities specifically related to drilling and production of geothermal resources shall be conducted on the existing steam field maintenance and storage yard located adjacent to the Francisco well pad, or on the new well pads, as necessary.

2. When each well drilling sequence has been completed, permit holder shall remove all drilling equipment and clean pad within thirty (30) days, unless drilling of other wells on the pad is immediately scheduled to commence within forty-five (45) days. All drill pads not having drilling activities shall be kept clean and neat in appearance and shall not be used for equipment and materials storage.

G. TO PROTECT AGAINST SURFACE WATER DEGRADATION

1. The permit holder shall obtain by right, purchase or agreement all water used for the initial pad construction, for construction and on-going dust control. Groundwater shall not be used for reinjection purposes. Water used for this project shall be obtained from leaseholder water wells, with the exception of steam condensate used for reinjection. Use of surface water is prohibited.

2. All areas on each pad containing potentially hazardous materials, including the equipment service and fuel transfer areas and the area occupied by the drilling rig, shall drain to sediment basins. Hazardous materials shall not be allowed on the pads unless they are in compliance with all safety regulations and the requirements of the Lake County Environmental Health Division. All other areas used for equipment service, fuel transfer, or potentially hazardous materials shall be compacted to 90% and be bermed. Spraying of hydrocarbon based fluids or application of solvents or other potentially hazardous materials shall not be conducted in the storage and welding areas adjacent to the steam field office. If violations of this condition occur, impermeable catch basins and more extensive berming shall be required to protect water quality.

3. Permit holder shall monitor or contract to monitor water quality in compliance with all CVRWQCB requirements, and aquatic biology in High Valley Creek in the vicinity of the two well pads Type, location and frequency of testing shall be determined by the Community Development and Health Departments in consultation with CVRWQCB. Said monitoring proposal shall be submitted and approved by the Community Development and Lake County Environmental Health Departments prior to issuance of a grading permit for pad construction.

4. If the permit holder elects to conduct or participate in a watershed or regional water quality monitoring program, it can be substituted for the requirements of condition G.3. Such a proposal must be submitted to and accepted by the Community Development and Health Departments in consultation with CVRWQCB prior to termination of the monitoring outline in E.3.

5. In addition to the periodic water monitoring discussed in condition G.3 above, permit holder shall conduct a continuous water quality monitoring program similar to that identified in Attachment 3 of this use permit. Plans and locations for this continuous water quality monitoring program shall be submitted to and approved by the Lake County Community Development and Health Departments prior to pad, road, or pipeline construction. Specific design for this program shall be approved by the Community Development and Health Departments in consultation with CVRWQCB, and shall be operational prior to construction of the well pads.

6. The permit holder is encouraged to cooperate with other area geothermal operators to implement this continuous water quality program in a cost effective manner.

7. Best Management Practices (BMPs) to control erosion and sedimentation from all construction activities shall be installed onsite prior to the onset of first rains. BMPs shall be monitored throughout the rainy season and maintained in working order until the site is stabilized. Grading shall not occur during the winter months without special approval from the CDD Director and submission of an erosion control plan for winter grading.

8. Prior to the commencement of grading or construction, the permit holder shall submit Notice of Intent (NOI) to comply with the Construction General Permit with the Central Valley Regional Water Quality Control Board (CVRWQCB) along with a Storm Water Pollution Prevention Plan (SWPPP). A copy of the NOI and SWPPP shall be submitted to the CDD.

9. Prior to the issuance of a grading or building permit, the permit holder shall submit final engineered drainage plans and calculations to be reviewed and approved by the Water Resources Engineer. The plans should include designs and BMPs that will prevent a substantial increase in rate and direction of surface flow offsite.

10. The injection of water from on or off site surfaces or groundwater sources is prohibited except for rainwater and steam condensate. The injection of wastewater shall be subject to approval by the County Health Department.

11. Applicant shall comply with all provisions of the waste discharge requirements approved by the CVRWQCB and all other state laws and regulations pertaining to waste hauling and water quality.

H. AIR QUALITY:

1. Applicant shall meet all regulations and standards set by the Lake County Air Quality Management District (LAQMD) and utilize on a continuous basis the state of the art of H_2S technology. All conditions of the LAQMD Authority to Construct and Permit to Operate are herein referenced and made part of this use permit. This use permit does not supersede the authority of said District in anyway.

2. After completion of geothermal wells, the H2S emissions during standby venting of steam shall be either abated to an acceptable level per Air Quality Management District rules and regulations or standby venting shall be curtailed to the level necessary to attain emission limitations. Curtailment methods to be utilized shall include the shutting in of geothermal wells in accordance with established procedures.

3. If air quality exceeds of H_2S occur as a result of drilling operations or ongoing steam field operations on either of the BRP GeoResources well pads, the permit holder shall provide the option for temporary relocation of affected Binkley Family Ranch residents until H_2S levels return to safe levels. In such cases, the permit holder shall provide temporary lodging for said resident(s) at a local lodging facility (Cobb or Kelseyville), at the permit holder's expense.

4. Permit holder shall minimize vehicular dust on unpaved roads and drill pads during construction and operation by the use of water or other acceptable dust palliative approved by LCAQMD.

5. Permit holder shall provide accurate chemical analysis of the geothermal resource if it is encountered, when required by the Lake County Air Quality Management District. The analysis shall include accurate "wet chemistry" and gas chromatograph determinations as referred to in the LCAQMD permits. Heavy metals such as lead, chromium, arsenic, mercury and cadmium should be determined as well as substances such as radon, hydrogen sulfide, boron, manganese, methane, fluoride, ammonia and carbon dioxide. The analysis should also include pH.

6. Prior to drilling any wells on the BRP GeoResource Leasehold, the permit holder shall assist with the funding of a portable air monitoring station, to be operated by the LCAQMD.

7. Permit holder shall provide the Lake County Air Quality Management District with a venting plan which details the equipment and procedures which will be employed during power plant outages (stacking periods) and during maintenance venting. This plan shall include proposed hours during which planned maintenance venting will occur as well as projected time which will elapse between unscheduled power plant outages and the throttling back of wells to minimum bleed. The plan shall include personnel available for unscheduled outages and projected response time of those personnel.

8. In the event of casing blowout or other uncontrolled venting, the permit holder shall move immediately to control the vent. No more than 24 hours shall elapse from the date of the uncontrolled vent to the date of equipment relocation to secure it.

9. All leasehold roads used by the permit holder shall be regularly monitored for soil accumulation and shall be kept clean, in accordance with the mitigation measures outlined in the approved MMRP (Attachment A of this use permit).

10. BRP shall fund H_2S monitoring at the Fletcher residence, to be coordinated and/or managed by the LCAQMD. Frequency and timing of any such monitoring shall be as determined by the LCAQMD. If found to significantly contribute to an impact, BRP shall work with the LCAQMD and Community Development Department to mitigate the impact.

I. TO PROTECT AGAINST NOISE EXPOSURE:

1. The permit holder shall not exceed a maximum noise standard of Ldn 50 dBA at residential receptors. The permit holder shall design project components to minimize noise emissions

generally consistent with the best available control technology (BACT). The Community Development Department shall determine BACT for each drill site consistent with the EIR certified for the project and the approved MMRP.

2. If measurements by the Community Development Department indicate a possible violation of Condition I.1, a measurement of the source noise in an appropriate location in the immediate vicinity of the source may be made to determine if the source noise is sufficient to cause the level measured to exceed 50 dBA Ldn using the inverse square law.

3. Mufflers of advance design will be required for pertinent geothermal equipment.

4. Mounts for sound walls shall be permanently installed on the well pads and sound walls shall be installed prior to any drilling activity or other maintenance activities where a well rig is to be used. The location of sound walls shall be reviewed and approved by the Community Development Department prior to installation.

5. Drill rig platforms shall be wrapped with sound-deadening blankets prior to drill rig operation.

6. Not more than two (2) drilling rigs shall be operated simultaneously within the BRP GeoResource Leasehold.

7. Prior to commencement of new drilling, or other operations where a rig is to be operated, the permit holder shall schedule an inspection with the Community Development Department for verification that all appropriate noise reducing measures are installed.

8. Drill pipes shall not be laid in bins between the hours of 7 p.m. and 7 a.m. the following day.

9. The use of truck engine brakes on High Valley Road shall be prohibited except in cases of brake fade or failure where the use of an engine brake is necessary for safety.

J. ACCESS TO PROJECT AREA

1. Should an alternative access route be secured by the permit holder through either Cold Water Creek Road or Glenbrook Road, this use permit authorizes all construction traffic and well rig traffic to utilize said road upon review and verification by Cal Fire and the Community Development Department that the road meets minimum safety requirements for said construction traffic.

2. The Permit holder shall comply with all requirements of the Traffic Control and Road Maintenance Plan for High Valley Road (Attachment B) for any project traffic using High Valley Road between the Francisco Leasehold and Bottle Rock Rd.

3. When accessing High Valley Road from Bottle Rock Road, The permit holder shall, except in cases of verified emergency or unforeseen unusual need, schedule delivery of supplies and travel by large vehicles through High Valley Road to the hours of 7:00 a.m. to 7:00 p.m. Monday through Friday. The use of High Valley Road between Bottle Rock Road and the Francisco Lease boundary by heavy vehicles or equipment shall be prohibited on Saturdays, Sundays, all legal holidays, and during school bus hours, except in verified emergency or unforeseen unusual need. For the purposes of this permit unforeseen unusual need is defined as well repair or new drilling operations within the Binkley leasehold that once started, cannot be stopped until completed, and which require resupply of materials or equipment that cannot otherwise be staged during weekdays. In cases where weekend commercial truck traffic may be necessary due to unforeseen unusual need, the permit holder shall notify the Community Development Department a minimum of 24 hours in advance with reasons for the weekend delivery. An email list of High Valley Road residents shall be maintained by the Community Development Department and residents shall be notified when weekend truck traffic is authorized. If it is not possible to provide 24 hour advanced notification, the permit holder shall distribute an email to the High Valley Road residents and the Community Development Department that describes the

reason for the weekend commercial truck traffic, estimated time that the delivery will occur, and number of trucks expected.

4. When accessing High Valley Road from Bottle Rock Road, the hours of large truck traffic, defined as vehicles over one (1) ton capacity, shall be restricted to the hours from 7:00 a.m. to 7:00 p.m., except when setting casing and in cases of verified emergency or unforeseen unusual need. An emergency is defined for the purpose of this permit as a spill, accident, imminent loss of equipment or other unforeseen event requiring immediate action to protect public health, safety or welfare. All such emergencies shall be reported to the Community Development Department as soon as possible and in no case more than one hour after occurrence.

5. The Permit holder shall encourage employees to car pool whenever possible.

6. All traffic associated with the project development and on-going operations of the steam field shall be subject to a 15 MPH speed limit.

7. All leasehold roads used by the permit holder shall be maintained in good repair, with all-weather surfaces approved by the Community Development Department, in accordance with the mitigation measures outlined in the approved MMRP (Attachment A).

8. Access by Binkley Leasehold residents through the BRP GeoResource Leasehold shall be determined by the surface agreement between the surface owner and the permit holder. No access roads shall be blocked within this leasehold unless required by a regulatory agency(s).

K. TO PROTECT ARCHAEOLOGICAL RESOURCES:

1. The Archaeological sites analyzed by the EIR prepared for the BRP GeoResource project shall be preserved in their existing state as specified in the approved MMRP (Attachment A of this use permit). No excavation or disturbance by the permit holder or their contractors shall be permitted at these archaeological sites.

2. If archaeological or paleontological resources are encountered during grading, all work in the immediate area of the find(s) shall cease until a qualified professional is retained to determine the significance of the resources and recommend mitigations to be completed by the permit holder, if necessary, subject to the approval of the Community Development Department.

L. TO CONTROL VISUAL IMPACTS:

1. Prior to operation, pipelines and sound walls shall be colored dark green to provide maximum color compatibility with the surrounding natural environment.

2. All pad, road, and pipeline sites shall utilize existing vegetation and topography to the maximize extent practical for visual screening.

3. Any proposed outdoor lighting shall be shielded or directed downward, away from adjacent residential areas. Details, including shielding methods, light placement, etc., shall be provided to the Community Development Department for review and approval prior to installation.

M. SITE RECLAMATION:

1. The permit holder shall abandon any well in accord with the Bureau of Land Management regulations.

2. The Permit holder shall submit a project site reclamation plan to the Community Development Department for review and approval prior to issuance of grading permits. The

reclamation plan shall including re-vegetation, grading, drainage and maintenance plans, and shall detail how the disturbed areas will be returned to native vegetation upon site closure or abandonment. The Permit holder shall revegetate the pads with native grasses and woody vegetation.

3. The Permit holder shall remove all pipelines and supports not necessary for field operation.

4. Upon site closure, all well pad surfaces shall be covered with topsoil from the approved topsoil stockpile areas, and the pads shall be revegetated in accordance with the approved revegetation plan specified in condition C.2.

N. PUBLIC HEALTH AND SAFETY:

1. The permit holder shall comply with the requirements of the fire prevention practices and measures as prescribed by Cal Fire and/or County of Lake. Prior to commencement of drilling activities on the BRP GeoResource Leasehold, an emergency response contingency plan shall be submitted for approval by the Community Development Department that includes the permit holder's spill response plan & protocols. The permit holder shall work with the Community Development Department and the Office of Emergency Services to develop and maintain a current list of downstream property owners to be notified during any emergency involving surface water contamination (to be updated annually). Fire access maps indicating streets and signing shall be provided to the appropriate fire district(s).

3. All extra-wide and slow moving vehicles shall be preceded by a flag car while on public roadways. All hazardous waste generated on site shall be shipped in accordance with all state and federal regulations, and all necessary permits or approvals shall be obtained from CHP (California Highway Patrol).

4. Prior to entering the security gate onto high valley road, or in any case where an alternate access road is being used, the permit holder shall provide all truck drivers with a detailed map of the area in which they are traversing. Alternatively, a site map shall be distributed by the permit holder with each service agreement issued to vendors who will be performing work on the leasehold The map should include: a) all dangerous curves/elevation points--highlighted in red, b) speed limits/reduced limits depicted on the map, c) safe locations for vehicle inspections, and d) a serious warning clause/penalties if drivers violate any safety procedures while travelling on private roads.

5. The permit holder shall provide a vehicle inspection area on each well pad and designate it as the location for truck drivers to conduct their DOT-required vehicle safety inspections. The inspection shall include brakes, vehicle connection, wheels/tires, valves, tanks, etc. and other equipment as outlined in Title 13 CAC. After loading, a material inspection for leaks in the system shall be conducted. The permit holder shall also provide log-in sheets at the designated inspection area for truck drivers to complete, acknowledging the date and time that they conducted their vehicle safety inspections.

6. The permit holder shall be responsible for repair of any direct verifiable damage to public roadways resulting from construction or operation of this project, including actions by contractors or subcontractors.

7. Sanitary and hand washing facilities shall be provided at each drill site during well drilling, in full compliance with all rules and regulations of the Lake County Health Department.

8. The permit holder shall comply with all safety requirements of Cal/OSHA, including an accident prevention program, and conduct Cal/OSHA on-site worker safety inspections during construction and operation of the steamfield.

9. The permit holder shall surface all project roads with a double chip seal surface, or equivalent surface approved by the Community Development Department. Surfacing shall commence upon initiation of pad, road or pipeline construction and shall be completed once the well pads and pipelines have been constructed. These roads and road drainage

improvements shall be maintained throughout the life of the project.

10. The permit holder agrees that the Lake County Board of Supervisors shall have the right to require the permit holder to participate in a Geysers area seismic monitoring program on a pro rata basis, if recommended by the Lake County General Plan.

11. Provision shall be made for adequate access by firefighting equipment to the site, and fire access maps shall be provided to the appropriate fire district(s) and Cal Fire.

12. All supplemental plans required by this permit, including but not limited to re-vegetation, sediment, drainage monitoring and control, scenic enhancement, water monitoring, traffic control and maintenance, noise abatement, emergency fire and medical evacuation and accidental spills, shall be incorporated into the use permit once approved by the responsible department or official.

13. Prior to operation a financial assurance agreement, certificate of deposit or bond, satisfactory in form and content to the Lake County Counsel, shall be provided and maintained by the permit holder to insure cleanup in case of spills, landslides, mishaps and site reclamation upon abandonment. The initial amount of said financial agreement shall be determined by the County of Lake, in consultation with the permit holder and a Registered Civil Engineer. The amount of the financial assurance shall be adjusted every two (2) years in accordance with the San Francisco Area Consumer Price Index, and shall be payable to the County of Lake and require County approval to terminate.

Date of Planning Commission Approval: January 13, 2011

Date of Board of Supervisors Amendment Approval: March 15, 2011

By: Dana Bowen
Richard J. Coel
Community Development Director

ACCEPTANCE

I have read and understood the foregoing use permit and agree to each and every term and condition thereof.

Date: 1/13/12

Bill Haines
Applicant or Authorized Agent

PERMIT BOND

This Replacement Bond will supersede and replace Bond No. 20988 issued by U.S. Specialty Insurance Company

BOND NO. 1039709

$14,127.00 premium is for
a term of One year(s)
Effective Date of Bond: April 9, 2012

KNOW ALL MEN BY THESE PRESENTS:

That we Bottle Rock Power LLC 7385 High Valley Road Cobb, CA 95426, as principal, and the Lexon Insurance Company 256 Jackson Meadows Drive Hermitage, TN 37076 a corporation duly licensed to do business in the State of California, as Surety, are held and firmly bound unto County of Lake Lakeport, California, as Obligee in the penal sum of Seven Hundred Six Thousand Three Hundred Thirty-one and 00/100---------- Dollars ($706,331.00) lawful money of the United States to be paid to the Obligee, for which payment will and truly be made, we bind ourselves and our legal representative, jointly and severally by these presents

THE CONDITION OF THE ABOVE OBLIGATION IS SUCH, That whereas, the said Principal has been granted by said Obligee Use Permit Number 85-27 (formerly Use Permit 85-17), MCR Bottlerock Steamfield Geothermal Project and is required to file a financial assurance agreement to insure cleanup in the case of spills, landslides, mishaps and site reclamation upon abandonment.

NOW, THEREFORE, if said Principal shall faithfully perform the duties and in all things comply with Use Permit 85-27 and the laws and ordinance, including all amendments thereto, pertaining to the permit, then this obligation shall be void, otherwise to remain in full force and effect.

The liability of the Surety hereunder may, however, be terminated by giving one hundred and twenty (120) days written notice to the Principal and Obligee, and upon giving such notice, the Surety shall be discharged from all liability under this bond for any act or omission of the Principal occurring after the expiration of one hundred and twenty days form the date of the receipt of such notice

IN WTNESS WHEREOF, We have hereunto set our hands and seals this 9th day of April, 2012.

BOTTLE ROCK POWER, LLC

PRINCIPAL

By: _____

Lexon Insurance Company

SURETY

By: _____
Kieran J. Moran, Attorney in Fact

PERMIT BOND

This Replacement Bond will supersede and replace Bond No. 1000901551 issued by U.S. Specialty Insurance Company

BOND NO.1039710

$1,630.00 premium is for
a term of One year(s)
Effective Date of Bond: April 9, 2012

KNOW ALL MEN BY THESE PRESENTS:

That we Bottle Rock Power LLC 7385 High Valley Road Cobb, CA 95426, as principal, and the Lexon Insurance Company 256 Jackson Meadows Drive Hermitage, TN 37076 a corporation duly licensed to do business in the State of California, as Surety, are held and firmly bound unto County of Lake Lakeport, California, as Obligee in the penal sum of Eighty One Thousand Five Hundred Ten and 00/100 Dollars ($81,510.00) lawful money of the United States to be paid to the Obligee, for which payment will and truly be made, we bind ourselves and our legal representative, jointly and severally by these presents

THE CONDITION OF THE ABOVE OBLIGATION IS SUCH, That whereas, the said Principal has been granted by said Obligee Use Permit Number 09-01, BRP GeoResource Steamfield Project and is required to file a financial assurance agreement to insure cleanup in the case of spills, landslides, mishaps and site reclamation upon abandonment.

NOW, THEREFORE, if said Principal shall faithfully perform the duties and in all things comply with Use Permit 09-01 and the laws and ordinance, including all amendments thereto, pertaining to the permit, then this obligation shall be void, otherwise to remain in full force and effect.

The liability of the Surety hereunder may, however, be terminated by giving one hundred and twenty (120) days written notice to the Principal and Obligee, and upon giving such notice, the Surety shall be discharged from all liability under this bond for any act or omission of the Principal occurring after the expiration of one hundred and twenty days form the date of the receipt of such notice

IN WTNESS WHEREOF, We have hereunto set our hands and seals this 9th day of April 2012.

BOTTLE ROCK POWER, LLC

PRINCIPAL

By: _____

Lexon Insurance Company

SURETY

By: _____
Kieran J. Moran, Attorney in Fact