

Staff Report 67

APPLICANT:

Geysers Power Company, LLC

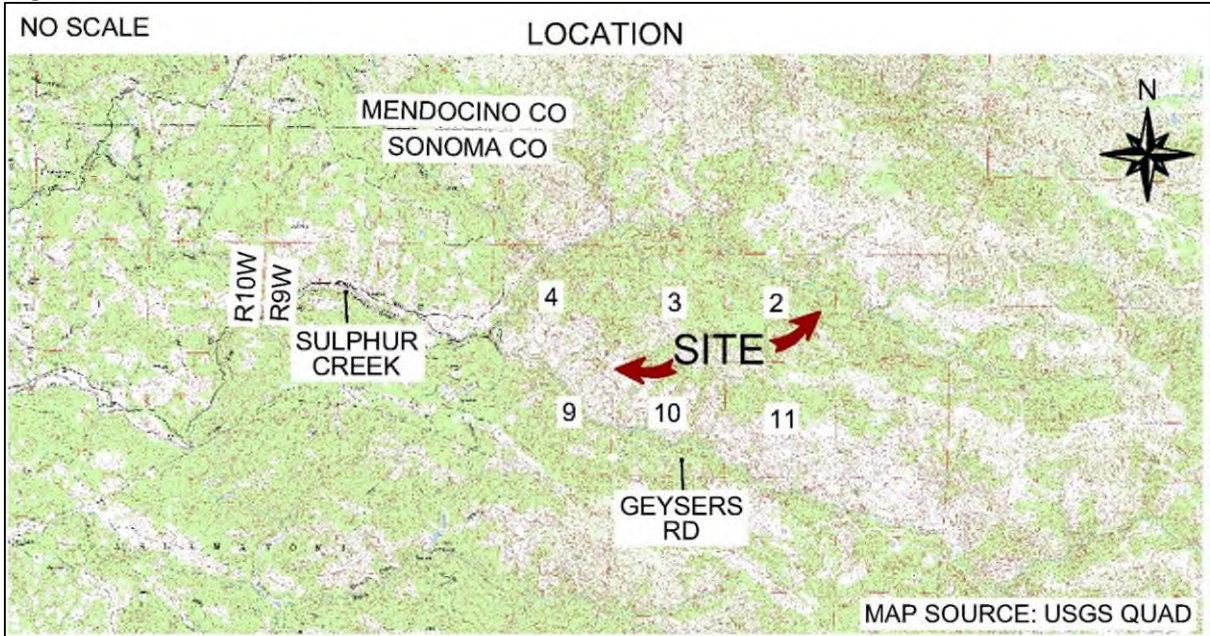
PROPOSED ACTION:

Issuance of a State Geothermal Resources Lease, non-surface use.

AREA, LAND TYPE, AND LOCATION:

241.3 acres of State fee-owned school land (also referred to as lieu land), comprising Assessor's Parcel Numbers: 117-140-002, 117-140-003, 117-140-004, 117-140-005, and 117-200-009. This acreage has been separated into Lease Parcels 1 and 2, and is located within the Geysers geothermal area composed of sections 2, 3, 4, 9, and 10, Township 11 North, Range 9 West, Mount Diablo Baseline & Meridian, Sonoma County (as shown in Figure 1).

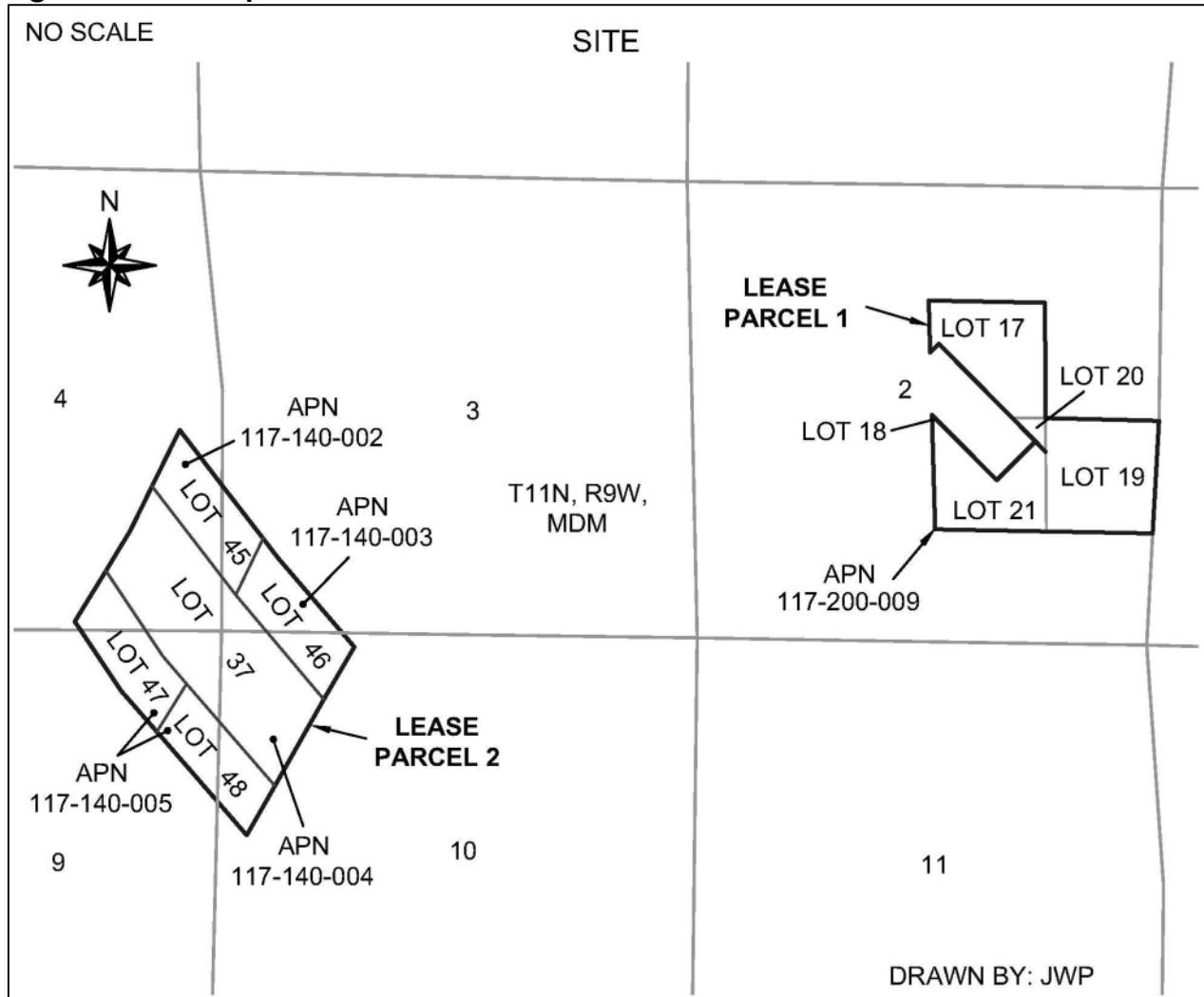
Figure 1. Location



AUTHORIZED USE:

The continued production of one geothermal well that has been directionally drilled into the State fee-owned subsurface within the lease from a well pad located on private land (as shown in Figure 2).

Figure 2. Site Map



NOTE: This depiction of the lease premises is based on unverified information provided by the Applicant or other parties and is not a waiver or limitation of any State interest in the subject or any other property.

TERM:

This lease shall commence on October 1, 2024, and for so long thereafter as geothermal resources are being, or are capable of being produced, or utilized in commercial quantities from the leased land or a unit in which the leased land

participates. The proposed geothermal lease does not authorize any development beyond the continued production from one producing well drilled into the subsurface of state's leased land.

CONSIDERATION:

- **Annual Rent** is \$1 per acre or \$241.3.
- **Royalty:** 12.5 percent of the gross value of geothermal steam, which is calculated monthly by using the Agreed Percentage of 42 percent multiplied by the gross value of electric power revenue received for that month.

The Agreed Percentage (42 percent) is the share of the gross value of electric power allocated to the Leased Land, which is in proportion to the volume of steam produced from the Leased Land relative to the total volume of steam.

- 5 percent of the gross revenue received from the sale of mineral products or chemical compounds.
- **Minimum Annual Royalty:** The royalty payment due at the end of any lease year to the Commission must not be less than \$12,065 (the equivalent of \$50 for each acre or fraction of an acre included in the leased land).

SPECIFIC LEASE PROVISIONS:

- **Liability Insurance:** Policy naming the State as additional insured, with coverage of at least \$2,000,000 per occurrence and a general aggregate limit of at least \$5,000,000.
- **Bond:** A bond increase in the amount of \$260,000 in favor of the Commission for plugging and abandonment and surface restoration of the one well drilled through the leased land.

The bond amount is subject to review and adjustment by staff every 5 years.

- **Management Fee:** Following approval of proposed lease 6422, the Applicant will execute a lease management agreement to cover staff costs associated with administration of the lease, including periodic lease inspections, compliance reviews, and audits.

BACKGROUND:

On October 1, 1974, the United States Bureau of Land Management issued two subsurface-only leases, known as Federal Geothermal Resources Leases (federal leases) CA 952 and CA 953, to three companies: Union Oil Company of California (Unocal) (50 percent), Magma Power Company (Magma) (25 percent), and Thermal Power Company (Thermal) (25 percent). On March 15, 1983, the Commission acquired the lands underlying the two federal leases as School Land indemnity selections, which were redesignated as leases 6422.2 and 6423.2, respectively. For existing lease 6422, the ongoing federal lease included a 40-year term with a September 30, 2024 expiration date while the other existing lease, Lease 6423, continues so long as the production persists.

On September 9, 1994, Calpine Corporation (Calpine) acquired Thermal. On March 19, 1999, the Commission approved the assignment of the respective interests of other interest holders to Thermal ([Item 58, April 13, 1999](#)). Thermal then assigned its resultant 100 percent interest to the Applicant, a subsidiary of Calpine Corporation. On April 13, 1999, the Commission and the Lessee (Applicant) agreed ([Item 59, April 13, 1999](#)) to amend State geothermal resource Leases 6422.2 and 6423.2 to include: (1) a management agreement for the periodic inspection of geothermal leases 4596, 4597, 6422, 6423 and (2) provide for a geothermal steam royalty valuation method that is not dependent on an arms-length sale of steam, but instead predicated upon the gross value associated with the sale of electrical power generated from the steam.

Since the original federal lease 6422, issued in 1974, is set to expire on September 30, 2024, and to continue production from the leased land, the Applicant applied on March 14, 2024, for a new State geothermal lease. The current lease is producing steam from one existing well called the Happy Bob State 1, which is directionally drilled into the state's subsurface parcel from an offsite well pad located on private lands. The existing well pad is located approximately 100 meters south of Lot 19, within Parcel 1 (as shown in Figure 2, above). Parcel 2, the western, diamond-shaped portion has never been explored. No additional wells are authorized under this lease, and an application would be required to amend the Lease if additional wells are considered so staff can conduct analysis under the California Environmental Quality Act (CEQA).

STAFF ANALYSIS AND RECOMMENDATION:

AUTHORITY:

Public Resources Code sections 6005, 6216, 6301, 6501.1, 6503, 6904, 6913, 6918, 6919, 8701, 21065.5, and 21090.1.

STATE'S BEST INTERESTS:

Public Resources Code section 6217.5 provides that the net revenue from school lands shall be deposited in the State Treasury to the credit of the State Teachers' Retirement System. In addition, the leasing and producing of geothermal resources on school land will help achieve California's goal of increasing electrical generation from renewable sources.

In the Geyser's field operations, the Applicant converts heat energy from the geothermal resources (steam) to electrical energy, while preserving the integrity and prolonging the life cycle of the geothermal reservoir by reinjecting the produced water back into the reservoir. Geothermal energy provides base load electricity 24 hours a day, 7 days a week. It is highly reliable, flexible, has a relatively small footprint, and produces no nitrogen oxide emissions and virtually no carbon dioxide (CO₂) emissions.

The continued production via the proposed lease will help the State achieve net zero greenhouse gas emissions as soon as possible, but no later than 2045 (AB 1279, 2022) and renewable energy procurement targets of 90 percent by 2035, 95 percent by 2040, and 100 percent by 2045 (SB 100, 2018; SB 1020, 2022).

Geothermal operations do not involve the production or burning of fossil fuels and help the State responsibly transition from dependency on fossil fuel development and embrace a clean energy future. Geothermal operations are regulated by State and county agencies that include the California Geological Energy Management Division and Sonoma County.

CLIMATE CHANGE:

The combination of more frequent and longer duration weather patterns contributing to high winds, low humidity, extreme heat, and thunderstorm and lightning events in California's forested mountain regions has contributed to an increasingly aggressive wildland fire season as a related product of climate change. This threat can be further elevated through prolonged drought conditions and a lack of forest fuels reduction management for forest land areas. In addition,

as stated in the [Safeguarding California Plan: 2018 Update](#) (California Natural Resources Agency 2018), climate change is projected to increase the frequency and severity of natural disasters related to flooding, fire, drought, extreme heat, and storms.

Although the surface of the lease area is forest land, which is vulnerable to weather events and the threat of wildland fires, the entire lease area is subsurface and would not be subject to conditions related to climate change.

CONCLUSION:

For all the reasons above, staff believes that the proposed geothermal lease is in the State's best interests and recommends approval.

OTHER PERTINENT INFORMATION:

1. Approval or denial of the application is a discretionary action by the Commission. Each time the Commission approves or rejects a use of school land, it exercises legislatively delegated authority and responsibility as trustee of the State's school land, as authorized by law. If the Commission denies the application, the Applicant will not be able continue producing on or underneath the leased land. Upon prior termination of the lease, the Lessee will have no right to a new lease or renewal of any previous lease.
2. This action is consistent with addressing the challenges and opportunities described in the Commission's 2021-25 Strategic Plan to "Embrace and safeguard multi-benefit School Lands and resource management stewardship that equitably balances responsible local and regional economic development, supports living wages, environmental protection, and revenue generation."
3. Staff recommends that the Commission find that this activity is exempt from the requirements of CEQA as a categorically exempt project. The project is exempt under Class 1, Existing Facilities; California Code of Regulations, title 2, section 2905, subdivision (a)(2).

Authority: Public Resources Code section 21084 and California Code of Regulations, title 14, section 15061 and California Code of Regulations, title 2, section 2905.

EXHIBITS:

- A. Land Description
- B. Geothermal Resources Lease 6422

RECOMMENDED ACTION:

It is recommended that the Commission:

CEQA FINDING:

Find that the activity is exempt from the requirements of CEQA as a categorically exempt project. The project is exempt under Class 1, Existing Facilities; California Code of Regulations, title 2, section 2905, subdivision (a)(2).

STATE'S BEST INTERESTS:

Find that the issuance of the proposed geothermal lease is in the best interests of the State.

AUTHORIZATION:

Authorize the issuance of a geothermal resources lease 6422, in substantially the form provided in Exhibit B, to Geysers Power Company, LLC, for lands described in Exhibit A, Land Description, and as shown in Figure 1, Location Map and Figure 2, Site Map (for reference purposes only); for so long thereafter as geothermal resources are being, or are capable of being, produced or utilized, in commercial quantities from the leased land or from unitized lands.

EXHIBIT A

LEASE 6422

LAND DESCRIPTION

Two parcels of State Indemnity School Lands situate in Section 2, Township 11 North, Range 9 West, Mount Diablo Meridian as shown on the official U.S. Government Plat dated August 4, 1994, and in Sections 3, 4, 9, and 10, Township 11 North, Range 9 West, Mount Diablo Meridian as shown on the official U.S. Government Plat dated June 30, 1981, located in Sonoma County, State of California, and being more particularly described as follows:

PARCEL 1

Government Lots 17, 18, 19, 20, and 21 of Section 2, Township 11 North, Range 9 West, Mount Diablo Meridian.

PARCEL 2

Government Lots 37, 45, 46, 47, and 48 of Sections 3, 4, 9, and 10, Township 11 North, Range 9 West, Mount Diablo Meridian.

END OF DESCRIPTION

Prepared on 4/17/2024 by the California State Lands Commission Boundary Unit.



Exhibit B

RECORDED AT THE REQUEST OF
AND WHEN RECORDED MAIL TO:
STATE OF CALIFORNIA
California State Lands Commission
301 East Ocean Blvd. Suite 550
Long Beach, CA 90802-8833
STATE OF CALIFORNIA
OFFICIAL BUSINESS
Document entitled to free recordation
pursuant to Government Code Section 27383

SPACE ABOVE THIS LINE FOR RECORDER'S USE

A.P.N. 449-111-23 & 449-111-26

County: Sonoma

Lease No. 6422
A4576

GEOHERMAL RESOURCES LEASE

This Lease consists of this summary and the following attached and incorporated parts:

- Section 1 Basic Provisions
- Section 2 Special Provisions Amending or Supplementing Section 1 or 3
- Section 3 General Provisions
- Exhibit A Land Description

SECTION 1

BASIC PROVISIONS

THE STATE OF CALIFORNIA, hereinafter referred to as Lessor, acting by and through the **CALIFORNIA STATE LANDS COMMISSION** (301 East Ocean Blvd., Suite 550, Long Beach, CA 90802-8833,), pursuant to Division 6 of the Public Resources Code and Title 2, Division 3 of the California Code of Regulations, and for consideration specified in this Lease, does hereby lease, demise, and let to Geysers Power Company, LLC, hereinafter referred to as Lessee, those certain lands described in Exhibit A hereinafter referred to as Leased Land, subject to the reservations, terms, covenants, and conditions of this Lease.

MAILING ADDRESS: William King
Geysers Power Company, LLC
10350 Socrates Mine Road
Middletown, CA 95461

LEASE TYPE: Geothermal Resources Lease

LAND TYPE: State's 100 percent reserved mineral interest school land and State-owned fee school land.

LOCATION: Approximately 241.3 acres in portions of Sections 2, 3, 4, 9 and 10, Township 11 North, Range 9 West, Mount Diablo Meridian, as described in Exhibit A, attached and by this reference made a part hereof.

1. LAND USE OR PURPOSE:

Lessee shall have the exclusive right to drill for, produce, utilize, save and sell geothermal resources from the Leased Land.

2. TERM:

This Lease shall be commencing on October 1, 2024, (effective date) and for so long thereafter as geothermal resources are being produced or utilized, or are capable of being produced or utilized, in commercial quantities from the Leased Land or lands unitized therewith, unless sooner terminated as provided in this Lease.

3. CONSIDERATION:

Lease Management Fee, Royalty, Rent, Geothermal Resources in Kind, Renegotiations of Consideration, defined below.

4. AUTHORIZATION:

Limited to one geothermal well and appurtenant facilities. Development associated with the production or transmission of electricity on the Leased Land are not authorized by this Lease and will require amendment to this Lease. As of the effective date, the surface of the Leased Land contains a pre-existing road "Flood Road" and the subsurface of the Leased Land contains a directionally drilled well bore originating from a surface well pad located outside the Leased Land servicing the well known as "Happy Bob State 1".

5. LIABILITY INSURANCE:

\$2,000,000.00 in current dollars per occurrence, and a general aggregate limit of at least \$5,000,000.00; defined in Section 2, special provisions below.

6. SURETY BOND OR OTHER SECURITY:

\$260,000 per well in favor of the Commission; defined in Section 2, special provisions below.

SECTION 2

SPECIAL PROVISIONS BEFORE THE EXECUTION OF THIS LEASE, ITS PROVISIONS ARE AMENDED, REVISED, OR SUPPLEMENTED AS FOLLOWS:

1. LAND USE OR PURPOSE

- A. Lessee shall have the exclusive right to inject geothermal fluids, water, or other fluids approved by the Commission staff, such approval not to be unreasonably withheld, into the Leased Land and upon such terms and for consideration deemed by the Commission to be in the State's best interests. However, no consideration shall be required for injection if the Commission is receiving royalties based on production from the Leased Land or based on the Commission's participation in a producing unit incorporating the Leased Land. Lessee shall not have the privilege or right to store hydrocarbon or other non-condensable gas beneath the Leased Land, nor any other privilege or right not expressly given.
- B. Lessee may conduct surveys, tests, or experiments on the Leased Lands necessary to undertake the purpose of the Lease. Lessee may use geological, geochemical, geophysical or other exploratory methods for determining the presence of geothermal resources in the Leased Land. No such survey, test or experiment shall be conducted without prior written approval of the Commission staff, such approval not to be unreasonably withheld.
- C. The Commission shall have the right to issue to persons other than Lessee nonexclusive exploratory permits or leases for minerals other than geothermal resources and for non-mineral purposes to conduct such surveys, tests or experiments or for any other purpose not incompatible with Lessee's activities authorized under this Lease. Lessee shall not interfere with the exercise of rights granted by the Commission to other persons to enter upon the Leased Land in order to conduct such surveys, tests, or experiments.

D. This Lease and operations under it shall be consistent with the principle of multiple use of public lands and resources as provided in the Public Resources Code section 6906.

2. STATE LEASE MANAGEMENT

Upon Commission approval of the Lease, the Lessee shall execute a separate Standard Reimbursement Agreement (State of California Standard Form 213) with the Commission for the administration of leases 6422, 4596, 4597, 5206, 7845, 8556, and 8844, subject to a \$25,000 per annum cap to start on January 1, 2025, with automatic annual renewals for so long as the leases are active. The Lessee shall be billed for reimbursement of Commission staff time incurred for the reasonable and necessary costs of field inspections; the administration and implementation of the terms of the lease, including, but not limited to, engineering review, royalty verification, audit, reservoir and geologic review, annual lease reviews; and any other staff time or expenditures to ensure lease operations conform to all the terms of the lease and the Commission's rules and regulations.

3. ROYALTY AND RENT

Lessee shall pay to the Commission royalties on geothermal resources produced, utilized, saved or sold from the Leased Land, and an annual land rent. Royalties shall be due and payable not later than the 25th day of the calendar month following the calendar month of production.

A. Lessee will pay a royalty of 12.5 percent of the Gross Value of Geothermal Steam produced from or attributable to the Lease. The "Gross Value of Geothermal Steam", which shall be calculated monthly, shall be determined by multiplying the Agreed Percentage by the Gross Value of Electric Power associated with steam produced from or attributable to the Lease. The share of the Gross Value of Electric Power attributable to the Lease shall be in proportion to the volume of steam produced from the Lease relative to the total volume of steam used to generate the electric power. The "Agreed Percentage" shall be 42 percent. For purposes hereof, the "Gross Value of Electric Power" shall mean all revenue received in connection with the first sale of electric power, including without limitation, all sales of electricity to the California Power Exchange, bilateral power sales contracts, payments from Reliability Must Run and/or Ancillary Services contracts with the California Independent System Operator, subsidies from the California Energy Commission's Existing Renewable Resources Account, and/or green power premiums, and any other value received by the Lessee or a related entity of Lessee, as consideration for

the sale or the ability to sell power generated from power plants served by steam produced from the Leased Lands. For purposes of this Section 3, an entity shall be deemed to be a "related entity" of Lessee if it directly, or indirectly through one or more intermediaries, controls the Lessee, is controlled by the Lessee, or is under the common control with the other entity; and "control" shall be conclusively presumed to exist whenever one entity owns or controls 10 percent or more of the equity and/or voting power of any entity."

- B. Lessee will pay a royalty of 5 percent of the gross revenue received from the sale of mineral products or chemical compounds recovered from geothermal fluids attributable to the Leased Land in the first marketable form.
- C. The minimum royalty payment due at the end of the lease year to the Commission during any lease year must not be less than the equivalent of \$50 for each acre or fraction of an acre included in the Leased Land.
- D. Lessee will pay an annual land rent of \$1 for each acre or fraction of an acre, the minimum allowed under the Public Resources Code Section 6913, subdivision (c), included in the Leased Land, payable on the first day of this Lease and each lease anniversary thereafter.

4. GEOTHERMAL RESOURCES IN KIND

At the Commission's option, which may be exercised upon 60 days' prior written notice, Lessee shall deliver to the Commission in kind, and in lieu of royalties due to the Commission, a percentage of the geothermal resources produced, utilized, saved or sold from the Leased Land, in an amount equal to the royalty share owed the State under this Lease. The State will exercise this option consistent with Public Resources Code section 6913, subdivision (f).

5. RENEGOTIATION OF CONSIDERATION

Royalties shall be renegotiated on or after the 10th anniversary of the initiation of this lease, and on every 10th anniversary thereafter. The negotiations shall not increase the maximum royalty rate by more than 50 percent over the royalty rate of the prior period.

6. DRILLING

Lessee acknowledges that any further development activities, which include drilling additional wells, on or into the Leased Land, beyond that specified under Section 2, Land Use or Purpose of this lease, shall require the further approval of the Commission and be contingent upon and subject to

additional environmental review of the project and site-specific impacts in accordance with the provisions of the CEQA. In the event Lessee proposes operations on or into the Leased Land that require additional environmental analysis for which the Commission is lead agency under CEQA, Lessee shall provide, in advance, funds sufficient to pay for the preparation of the required environmental documentation. The decision to allow further exploration and development activities on or into the Leased Land, beyond that specified under provision 8(b) of this lease, shall remain within the discretion of the Commission. Furthermore, nothing contained in this lease, nor in the relationship between the Commission and Lessee arising hereunder, shall impose any constraint or limitation upon the Commission with respect to the conduct of its legal responsibilities arising under CEQA, including without limitation, participating in any environmental review process permitted or required by law pertaining to any project proposed by Lessee, regardless of whether the proposed project would further the purposes of this lease.

7. OFFSET WELL REQUIREMENT

In the event any well is completed or placed into production after the effective date of this Lease on lands not owned by the Commission with any part of its producing interval within 500 feet of the exterior boundary of this Lease, then the Commission may notify Lessee, in writing or by email, to commence drilling an offset well thereto, and within reasonable time, not to exceed 180 days, as specified in such notice, Lessee shall commence operations for drilling an offset well. An offset well shall mean a well the producing interval of which is situated at a location in the Leased Land not more than 500 feet from the point on the exterior boundary of the Leased Land nearest to the producing interval of the well to be offset.

Notwithstanding the foregoing, if the Leased Land is part of a geothermal unit and shares in the revenue there from, wells drilled into that unit shall not create an obligation to drill an offset well into Leased Land.

8. OPERATIONS

- A. Lessee shall meet with Commission staff every other year to discuss Lessee's ongoing operations, and any plans for future exploration, development and operation, as such operations or plans related to the Leased Land or lands pooled or unitized with them.
- B. All operations on or into the Leased Land shall be carried on in a good and workman like manner in accordance with generally accepted good engineering practice and with due regard for the protection of life,

cultural resources and property, preservation of the environment, and conservation of wildlife, plants, and other natural resources.

- C. No well shall be drilled into the Leased Land, re-drilled, perforated, plugged-back, altered, converted, or abandoned, and no wellhead shall be removed, without Commission staff's prior approval, such approval not to be unreasonably withheld. All drilling shall be performed subject to the provisions of this Lease, the Public Resources Code, and State regulations applicable to the drilling of geothermal wells.
- D. Before commencing the drilling of a well into the Leased Land, Lessee shall notify the Commission of its intention to drill. The notice shall contain the location, derrick elevation, proposed depth and bottom-hole location, directional drilling program, drilling fluid program, blowout prevention equipment program, casing program, completion program, description of the size and shape of the drilling site, including a geological engineering report on the site, planned excavation and grading, and location of existing and proposed access roads.
- E. If any permits are required under the Federal Endangered Species Act, the California Endangered Species Act, and/or California Fish and Wildlife Code 1600, et. seq., for any wells to be drilled into the Leased Land, then Lessee shall consult with the U.S. Fish and Wildlife Service and/or the California Department of Fish and Wildlife, as applicable, regarding such permits.
- F. No power plant facilities, buildings, structures, production equipment, metering systems, pipelines, roads or electrical transmission lines shall be installed or constructed on the Leased Land without prior Commission approval, such approval not to be unreasonably withheld.
- G. If Lessee sells steam, hot water from which no minerals have been extracted, or associated gases, then Lessee shall meter the geothermal resources produced from the Leased Land. If Lessee sells electricity or mineral products derived from geothermal resources from the Leased Land, then Lessee shall meter such electricity or mineral products. Metering equipment shall be maintained and operated so that it will meet acceptable standards of accuracy. If Commission staff believes reasonable standards are not being maintained, it shall give notice to Lessee and a reasonable opportunity to Lessee to upgrade such equipment. However, if the Leased Land is committed to a geothermal unit, then no separate metering of geothermal resources or minerals produced from the Leased Land shall be required.

- H. If the Leased Land contains rock strata known or suspected by Lessee or Commission staff to contain hydrogen sulfide (H₂S), Lessee shall submit a contingency plan for the protection of personnel and equipment while drilling in, or conducting operations in wellbores open to rock strata known or suspected to contain H₂S, establish a training program to promote efficient safety procedures in the H₂S contaminated environment, and install an H₂S detection system with an indicator and alarm in areas suspected or known by the State or Lessee to contain levels of H₂S considered to be dangerous to the health and safety of personnel. The contingency plan, training program and detection system must be approved by Commission staff, such approval not to be unreasonably withheld.
- I. Commission staff shall conduct inspections of lease operations as necessary during the term of the Lease. Subject to Section 2, Provision 2 above, all reasonable and necessary costs for the administration and implementation of the inspections of such operations shall be paid by Lessee through a Standard Reimbursement Agreement or other suitable instrument. All costs shall be calculated under provisions of the State Administrative Manual.

9. REQUIRED PRODUCTION AND TESTING

Except where the Leased Land is in an approved geothermal unit, if Lessee supplies geothermal resources to any facility from wells on both the Leased Land and wells on other lands, and all such wells together can produce a quantity of geothermal resources greater than the maximum quantity that can be used by the facility, Lessee shall produce and sell or use geothermal resources from the wells on the Leased Land in proportion to their deliverability relative to the total deliverability of all the wells. Further, if Lessee completes wells with productive intervals on both the Leased Land and adjacent land, Lessee shall perform tests to determine the allocation of production from each side of the Lease line. Lessee must obtain Commission staff's approval for both the method of testing and the resultant allocation of production, such approval not to be unreasonably withheld.

10. ENVIRONMENTAL IMPACT

Lessee acknowledges that any drilling or development activity proposed specifically on or into the Leased Land that is not permitted by prior environmental documentation will require further Commission approval and may be contingent upon and subject to additional environmental review in accordance with the provisions of the CEQA. If the Lessee proposes

development activities or operations on or into the Leased Land that require additional environmental analysis for which the Commission is the lead agency under the CEQA, Lessee shall provide, in advance, funds sufficient to pay for the preparation of the required environmental documentation.

11. WASTE OF RESOURCES, DAMAGE, LOSS AND LIABILITY

Lessee shall use all reasonable precautions to prevent waste of damage to or loss of natural resources (surface and subsurface) and reservoir energy in or under the Leased Land and shall be liable to the Commission for any such waste, damage or loss to the extent that it is caused by the negligence of, the breach of any provision of this Lease by, or the noncompliance with applicable statutes or regulations by, Lessee, or its employees, agents or contractors. Nothing in this Lease shall diminish any other rights or remedies that the State may have in connection with any such negligence, breach or noncompliance.

12. GEOTHERMAL UNITS

- A. Pursuant to the Public Resources Code section 6923, for the purpose of conserving the natural resources of geothermal resources areas, Lessee may commit the Leased Land to a geothermal unit as provided below. As used herein, the term "geothermal unit" means a cooperative plan of development and operation for the production, utilization, and conservation of geothermal resources, where separate lands and leases held or controlled by Lessee are pooled, developed, and operated as a single working unit. The terms "unitized" and "unitization" as used elsewhere in this Lease refers to the combining of lands to form a geothermal unit.
- B. With Commission staff's prior written consent, Lessee may commit the Leased Land to one or more geothermal units, provided the Leased Land is committed in its entirety.
- C. In the interest of increasing the ultimate recovery of geothermal resources from unreasonable waste, and protecting adjacent landowners, the Commission may require the Lessee to enter into a unit or cooperative agreement with respect to the Leased Land.
- D. Lessee shall execute a declaration of unitization describing the lands or leases included within any geothermal unit to which the Leased Land is committed. A copy of each such declaration or amendment thereto shall be delivered to the Commission.

- E. Drilling operations on and production from lands so unitized with the Leased Lands shall be deemed to be drilling operations on and production from the Leased Land that are included in the unit.

13. COMMINGLED PRODUCTION

Except where the Leased Land is in an approved geothermal unit, Lessee may commingle production from any two or more wells, without regard to whether such wells are located in the Leased Land or elsewhere, provided Lessee shall first install and maintain meters to measure the amount of geothermal resources produced from the Leased Land. Such commingling shall be discontinued at any time Commission staff determines that standards of measurement for accuracy or quality are not being maintained, and shall not be resumed until such standards are restored.

14. SUSPENSION OF OPERATIONS

In the event of any disaster affecting the safety of operations on the Leased Land, or uncontrolled flow of geothermal resources or pollution resulting from operations on the Leased Land, Lessee shall immediately suspend all drilling and production operations responsible for the disaster, uncontrolled flow or pollution, except those which are corrective or mitigative, and promptly notify Commission staff by telephone. Drilling and production operations shall not be resumed on the Leased Land until adequate corrective measures have been taken and authorization for resumption of operations on the Leased Land has been given by Commission staff, such approval not to be unreasonably withheld.

15. SUBSIDENCE

Lessee and the Commission acknowledge that subsidence in the Geysers area, particularly that part of Sonoma County where the Leased Land is located, is monitored by, and in accordance with the requirements of, the California Geologic Energy Management Division (CalGEM) and the County. Lessee shall comply with all subsidence limitations and mitigation measures imposed on Lessee's operations in the Leased Land by law, the CalGEM, and the County.

16. ENTRY BY STATE

Lessee consents to the inspection of its operations at all reasonable times by any person authorized by Commission staff. Such inspection shall include, but not be limited to, inspection of wells, improvements, pipelines, metering equipment for geothermal resources production and power generation and

all other fixtures used in connection with Lessee's operations in or adjacent to the Leased Land or lands unitized therewith. No entry by Commission staff, or by persons authorized by Commission staff, shall give Lessee any right to charge for or subject the Commission to liability for any loss of occupation or quiet enjoyment of the premises.

17. INDEMNIFICATION AND INSURANCE

- A. Lessee shall be liable to the Commission for all damage to any reservoir underlying the Leased Land and any loss of geothermal or other natural resources to the extent such loss is caused by the negligence of, or the breach of any provision of this Lease by, or noncompliance with any applicable statutes or regulations by, the Lessee, its employees, servants, agents or contractors. Nothing in this Lease shall diminish any other rights or remedies that the Commission may have in connection with any such negligence or breach.
- B. Lessee shall indemnify the Commission and hold it harmless from any and all claims, actions, causes of action, liabilities, losses, costs, damages and expenses, including, without limitation, for loss of or damage to property, injury to or death of a person or persons, or other harm, including harm to the environment, to the extent arising out of or connected with the acts or omissions by or on behalf of the Lessee under this Lease or on the Leased Land, or any breach of any of Lessee's obligations under this Lease. Lessee waives any defense to an action for breach of a covenant of this Lease or for damages or indemnification, including without limitation any such action resulting from a toxic or hazardous substances spill or other harm to the environment, based on the fact that the act or omission complained of was committed by an independent contractor. Lessee agrees to assume responsibility for all acts and omissions of its independent contractors, whether or not such contractors, at the time of the act or omission, are acting within the scope of their employment or license. The foregoing waiver by Lessee of the defense that the act or omission complained of was committed by an independent contractor, and the assumption of liability by Lessee for all acts and omissions of its independent contractors, shall inure exclusively to the benefit of the Commission and is not intended to extend to or provide any benefit to third parties, including without limitation, other state and federal agencies. The obligations of Lessee under this provision shall survive the expiration or earlier termination of this Lease.
- C. Lessee shall procure and maintain at Lessee's sole cost and expense a

commercial general liability policy of insurance applying to the Leased Land, the operations of the Lessee therein and the business operated by Lessee. Such insurance shall be written on an occurrence basis and shall include broad form contractual liability insurance coverage insuring Lessee's indemnification obligations under this Lease and include the State of California by endorsement as additional insured to the extent of the indemnity obligations assumed hereunder. Such coverage shall have liability limits of at least \$2,000,000 in current dollars (as defined below) per occurrence, and a general aggregate limit of at least \$5,000,000 in current dollars; provided, however, that such liability limits may be provided through a combination of primary and excess (i.e., umbrella) insurance policies. Any liability insurance policy shall be written to apply to all bodily injury, property damage, personal injury and other covered loss, however occasioned, during the policy term, and shall be endorsed to provide that such coverage shall be primary and that any insurance maintained by the State shall be excess insurance only. Such coverage shall also contain commercially reasonable endorsements as reasonably requested by Commission staff and shall provide the broadest scope of coverage for liability arising from pollution, explosion, collapse and underground property damage as is available and commercially appropriate. The insurance required by this provision shall provide for severability of interests; shall provide that an act or omission of any one of the named or additional insured shall not reduce or avoid coverage to the other named or additional insured; and shall, subject to the policy's terms and conditions, afford coverage of claims based on acts, omissions, injury and damage, which claims occurred or arose (or the onset of which occurred or arose) in whole or in part by Lessee or its independent contractors during the policy period. All policies shall be issued by insurers admitted to transact business in California and that have an excellent rating of at least A- in the then-current edition of Best's Insurance Guide. Lessee shall deliver a certificate of insurance to the Commission as soon as practicable after securing the required insurance. All policies shall contain an undertaking by the insurer or their authorized agent to notify the Lessee in writing not less than 30 days prior to cancellation or other termination thereof. Lessee shall promptly share with the Commission any such notification received. Lessee shall furnish the Commission with proof of renewal or binders for new insurance at least 5 days before the expiration date of each policy.

- D. Lessee shall repair all damage to the Leased Land, and to fixtures, improvements or personal property on the Leased Land, caused by or

resulting from operations of or on behalf of Lessee under this Lease, or the breach of any of Lessee's obligations under this Lease. Lessee shall not be responsible for any damage caused by or resulting from the Commission's sole negligence.

- E. Lessee shall maintain Worker's Compensation Insurance as required by law and Employer's Liability Insurance with limits of not less than \$1,000,000 in current dollars per occurrence, and in form reasonably satisfactory to Commission staff.
- F. Lessee shall maintain business auto liability insurance with limits of not less than \$1,000,000.00 in current dollars per occurrence. Such insurance shall cover liability arising out of any auto including owned, hired and non-owned autos, and shall include the Commission as additional insured by endorsement.
- G. Current dollars means a dollar amount calculated every fifth anniversary of the effective date of this Lease, by multiplying the dollar amount specified in this Lease by a fraction, the numerator of which is the Consumer Price Index (CPI) for All Urban Consumers (U.S. All Items, Series ID CUUR0000SA0, Base Year 1982-84 = 100, published by the U.S. Department of Labor, Bureau of Labor Statistics) last published immediately prior to each applicable fifth anniversary of the effective date of this Lease, and the denominator of which is the CPI last published immediately prior to the effective date of this Lease, provided however that the specified minimum insurance limits shall not be adjusted unless the current dollars calculation results in at least a 25 percent increase in minimum insurance limits as of the effective date of this Lease.

18. SURETY BOND OR OTHER SECURITY

Lessee shall furnish, and maintain until released by the Commission, a bond or other security device approved by Commission staff, in the amount of \$260,000 per well, to be in favor of the Commission for its exclusive use and benefit, guaranteeing the faithful performance by Lessee of the terms and conditions of this Lease, up to and including the full abandonment and removal of improvements placed by Lessee on the Leased Lands. This requirement shall be separate from any other bonding provisions of any other federal, state or local agency having jurisdiction over Lessee's operations on the Leased Land. The amount of the bond may be reviewed by the Commission no more than once every 5 years, starting on the effective date of the Lease, and shall be adjusted so that the total value of the bond

matches the State's estimated cost of abandoning the wells and improvements authorized under this Lease.

SECTION 3

GENERAL PROVISIONS

1. GEOTHERMAL RESOURCES

The term "geothermal resources" as used in this Lease shall have the meaning given by the Public Resources Code section 6903.

2. INTEREST AND PENALTIES

- A. Royalties, rentals and other monetary considerations that are not paid when due shall bear simple interest from their due date until they are paid at the rate of 1.5 percent per month on the unpaid balance.
- B. Royalties, rentals and other monetary considerations that are not paid when due shall be assessed a penalty of 5 percent of the amount of any such past due royalties, rentals or other monetary considerations in accordance with the Commission's regulations.
- C. Past due royalties, rentals and other monetary considerations include, but are not limited to, amounts which were not paid because of Lessee's unreasonable use of inaccurate information in computing the royalties, rentals and other monetary considerations and Lessee's unreasonable errors in the computations themselves. The determination of what errors of Lessee are unreasonable rests with the Commission.

3. RECORDS AND REPORTS

Lessee shall keep accurate records of its operations on the Leased Land or lands unitized with them, and shall file with the Commission the following information in the time and manner specified:

- A. Not later than the 25th day of the calendar month following the calendar month of production, Lessee shall submit a detailed royalty accounting statement in such form as may be prescribed by Commission staff, including, but not limited to, information showing the amount of gross revenue derived from all geothermal resources produced, shipped, utilized or sold, and the amount of royalty due. At the request of Commission staff, Lessee shall provide more detailed statements and explanatory materials in order to aid Commission staff in interpreting and evaluating Lessee's royalty accounting statement. All statements are

subject to audit and revision by the Commission. The Commission may inspect, at all reasonable times, all Lessee's books, records and accounts relating to operations under this Lease, including, but not limited to, the development, production, sale, utilization or shipment of geothermal resources. Lessee waives any statutory or other rights or objections it might have to such inspection by the Commission. All production data shall be deemed to have been "obtained in confidence" for purposes of Government Code section 6254, subdivision (e), and be disclosed to other persons only with the written consent of Lessee or upon the determination of Commission staff that their disclosure is in the public interest.

- B. Lessee shall supply to Commission staff all physical and factual exploration results, logs, surveys and any other data in any form resulting from operations on the Leased Land or lands unitized with them, including, but not limited to, any surveys, tests or experiments conducted on the Leased Land by Lessee or by any person or entity acting on behalf of Lessee. Lessee shall also supply to the Commission the results of all geological, geophysical and geochemical tests, experiments, reports and studies, interpretive or factual, including, but not limited to, reservoir studies, computer modeling work and tests, experiments, reports or studies relating to injection or reservoir depletion on the Leased Land or lands unitized with them, irrespective of whether the results of such tests, experiments, reports or studies contain sensitive proprietary or confidential information or trade secrets. All of the aforementioned data and results shall be supplied to the Commission within 30 days of completion of any recorded portion of the operation, test, experiment, report or study from which the data or results are obtained. All data and documents supplied by Lessee pursuant to this Records and Reports shall be deemed to have been "obtained in confidence" for purposes of Government Code section 6254, subdivision (e) and be disclosed to other persons only with the written consent of Lessee or upon the determination of Commission staff that disclosure is in the public interest. For purposes of this Lease, in determining the public interest, the Commission shall consider the interest of Lessee.

4. EXAMINATION OF BOOKS

Lessee waives all rights it may have to prevent the Commission's examination at reasonable times of the books and records of any individual, association or corporation that has transported for, or received from, Lessee any geothermal resources produced, utilized, saved or sold from the Leased Land. Lessee waives all rights it may have to prevent the Commission's

examination at reasonable times of the books and records of any such individual, association or corporation with respect to such individual's, association's or corporation's operations, wells, improvements, machinery and fixtures used on or in connection with the Leased Land.

5. WAIVER OF USE OF DATA

Lessee waives any statutory or other right to prevent disclosure to the Commission, or a duly authorized employee or representative of the Commission, of any information, reports, data or studies of any kind filed by Lessee with any federal, state or local agency relating to the Leased Land, the geothermal resources thereunder or any operations performed on the Leased Land or lands unitized therewith, irrespective of whether such information, reports, data or studies contain sensitive, proprietary or confidential information or trade secrets. All information filed with the Commission as required by this Lease shall always be available for any use of the Commission or its duly authorized representatives. Any information, reports, data or studies obtained by the Commission from any public agency and that are not public records shall be deemed to have been "obtained in confidence" for purposes of Government Code section 6254, subdivision (e), and may be disclosed to other persons only with the written consent of Lessee or upon the determination of Commission staff that their disclosure is in the public interest. For purposes of this Lease, in determining the public interest, the Commission shall consider the interest of Lessee.

6. NOTICES

All notices to be given under this Lease can be provided electronically or in writing and deposited in the U.S. Mail, registered, with postage prepaid, and addressed as follows:

To the Commission: California State Lands Commission
Mineral Resources Management Division
301 E. Ocean Blvd., Suite 550
Long Beach, CA 90802-8833
Attention: Peter Regan, Assistant Chief

Email: Peter.Regan@slc.ca.gov
Telephone: (562) 590-5201

To the Lessee: Geysers Power Company, LLC
10350 Socrates Mine Road
Middletown, CA 95461
Attn: Land Specialist

Email: William.King@calpine.com
(707) 431-6191

With a copy to: Calpine Corporation
717 Texas Avenue, Suite 1000
Houston, Texas 77002
Attn: Chief Legal Officer
Chieflegallofficer@calpine.com

and a hard copy to: Calpine Corporation
Attn: Jill Van Dalen
3003 Oak Rd. Suite 400
Walnut Creek, CA 94597

The addressees to which the notices shall be mailed or emailed may be changed by written notice given by one party to the other as provided above. Nothing contained in this Notices shall preclude the giving of any notice by personal service to Lessee or its officers or agents. All payments specified in this Lease shall be made to the Commission at the address provided for notices to the Commission, unless the Commission instructs Lessee to send payments to another address.

7. PRESERVATION OF PROPERTY, WASTE DISCHARGE

Lessee shall perform all work with due regard for the preservation of the Leased Land and with due regard to the environmental impact of its operations in accordance with the following terms and conditions:

- A. Lessee shall remove the derrick, other equipment and facilities within 60 days after Lessee has stopped using them in its operations.
- B. All drilling operations shall be conducted in a manner that will eliminate, as far as practical, dust, noise, vibration and noxious odors. Operating sites shall be kept neat, clean and safe. Drilling dust shall be controlled to prevent its widespread deposition. Dangerous material deposited on trees and vegetation shall be removed. The determination as to what material is dangerous rests with Commission staff.
- C. Lessee shall file with the Regional Water Quality Control Board a report on any proposed waste discharge in accordance with State Water Code section 13260. Water shall be discharged in accordance with requirements prescribed by the California Regional Water Quality Control Board, and copies of such requirements and approvals filed with the Commission. The Commission and any other agency having jurisdiction over the affected lands shall also approve in advance the place and

manner of such waste discharge.

- D. Lessee shall notify the California Department of Fish and Wildlife and the U.S. Fish and Wildlife Service before beginning any operations that may adversely affect fish and wildlife resources. Lessee shall conduct its operations in a manner that will not interfere with the right of the public to fish upon and from California's public land, and that will not preclude the public's right to reasonable use of public land and waters.
- E. This Lease is granted subject to article 1, section 25 of the California Constitution, which provides that the people shall have the right to fish upon and from the State's public land and in the waters thereof, and the Commission hereby reserves in favor of the people the absolute right to fish upon the surface of the Leased Land.
- F. Any operations disturbing the surface of the soil, including road building, construction and movement of heavy equipment, shall be conducted in a manner that will not result in unreasonable damage to trees and plant cover, in soil erosion, or in degradation of California's waters including fish and aquatic life habitat.
- G. Lessee shall maintain existing roads and bridges on or serving the Leased Land in a condition at least equal to that before Lessee's use. New roads and bridges shall be located, constructed and maintained in accordance with applicable Commission approvals and local specifications.
- H. Lessee shall compensate the surface owner at market value for all timber cut from the Leased Land or otherwise damaged or destroyed. Lessee shall not obtain borrow pit material from the Leased Land without permission from and payment of its market value to the Commission.
- I. Lessee shall protect from damage and repair or replace, when damaged by Lessee, all improvements, structures, trails, ditches, pipelines, water developments, fences, crops and any other property of other persons, including the Commission, on or near the Leased Land.
- J. Lessee shall control access to drilling and production sites by the public to prevent accidents or injury to persons or property.
- K. Lessee shall pond drilling mud in a safe manner and place and, where required by Commission staff, post the site with danger signs and fence it in order to protect persons, domestic animals and wildlife. Any drilling mud that is determined to be hazardous by any federal, state, or local agency,

shall be disposed of in the manner required by the applicable statute or regulation.

- L. Lessee shall keep to a reasonable number and size any areas to be cleared and graded for drilling and production facility sites. Any clearing and grading shall be subject to the approval of Commission staff , such approval not to be unreasonably withheld.
- M. During drilling and remedial well operations, Lessee shall monitor continuously effluent gases at the wellhead in order to determine the emissions of H₂S and other toxic materials. Lessee shall submit to the California Air Resources Board and to any local Air Pollution Control District having jurisdiction, as required, the results of complete gas analyses, including toxic materials that would exist in vapor form at the wellhead temperature.
- N. Lessee shall keep noise levels for drilling or any other phase of operations to a minimum and at no time shall allow the noise level exceed local standards.
- O. The above requirements are in addition to, and shall not be construed as limitations upon, all other regulations, restrictions and measures provided in this Lease that are designed to restrict, modify or minimize the environmental impact of operations under this Lease.

8. EXISTING RIGHTS

This Lease is issued subject to all existing rights at the effective date of this Lease, and such rights shall not be affected by the issuance of this Lease.

9. RESERVATION OF RIGHTS

The Commission reserves the right to sell or transfer the Leased Land subject to the rights of Lessee under this Lease. The Commission also reserves the right to issue leases, permits and licenses to the surface and/or subsurface of the Leased Land for any purpose not inconsistent with the rights of Lessee under this Lease. This reservation includes the Commission's right at any time during the term of this Lease to grant to persons whatever easements or rights-of-way in the surface of the Leased Land the Commission determines to be necessary or appropriate, provided that no easement or rights-of-way shall be granted that unreasonably interferes with Lessee's operations.

10. COORDINATION OF ACTIVITIES

Lessee shall coordinate activities with other Commission lessees or permittees for the development of geothermal resources on lands nearby or adjacent to the Leased Land. Such coordination includes, but is not limited to, giving the Commission's lessees or permittees the right to use Lessee's access roads and unitizing or pooling the Leased Land with other leased or permitted lands, if the Commission determines that such action would facilitate the most efficient development of the Commission's geothermal resources, taking into account Lessee's economic interest. Notwithstanding the foregoing, in no event shall Lessee be required to engage in coordination activities that unreasonably interfere with Lessee's operations.

11. COMPLIANCE WITH LAWS

Lessee shall comply with all valid federal, state and local laws applicable to Lessee's operations on the Leased Land, including, but not limited to, the applicable provisions of the Public Resources Code Divisions 3 and 6 and all applicable and effective regulations adopted at any time during the term of this Lease under the authority of these statutory provisions.

12. EMPLOYMENT PRACTICES

Lessee shall not discriminate against any person in its employment practices because of race, color, ancestry, national origin, religion, sex, age, marital status, physical disability, AIDS, AIDS-related condition, sexual orientation, or other protected class under state or federal law. Lessee shall carry at all times full worker's compensation insurance covering all employees engaged in operations under this Lease.

13. TAXES

Lessee shall pay, when due, all taxes and assessments lawfully assessed and levied under the laws of the United States, the Commission or any of the State's political subdivisions against Lessee's interest in the Leased Land, against improvements, property or assets of Lessee situated upon the Leased Land, against the geothermal resources and other products produced from the Leased Land, and against all other rights of Lessee arising out of this Lease. There shall be no deduction from the royalties payable to the Commission by reason of the levy and payment of such taxes, assessments, fees, charges, or other amount for any of the above described reasons.

14. CANCELLATION

A. The Commission may cancel this Lease at any time before the discovery

of commercially valuable deposits of geothermal resources on the Leased Land or lands unitized with them upon the failure of Lessee, after 60 days' written notice and demand for performance, to exercise due diligence and care in the prosecution of the exploratory or development work on the Leased Land or lands unitized therewith, in accordance with the terms and conditions of this Lease.

- B. After the discovery of commercially valuable deposits of geothermal resources on the Leased Land, the Commission may cancel this Lease upon failure of Lessee, after 90 days' written notice and demand for compliance, to cure any breach or default under the terms and conditions of the Lease. Notwithstanding the foregoing, as to any breach or default which through the exercise of reasonable diligence cannot be cured within the 90-day time period allotted therefore, provided Lessee, within said 90-day period, commences measures to cure the breach or default and diligently pursues such measures to completion, Lessee's time to effect cure shall be extended as reasonably necessary to cure the breach or default. If the Lease is canceled, Lessee shall have the right to retain under this Lease all wells currently being drilled or producing geothermal resources in commercial quantities, plants and facilities, and rights-of-way through the Leased Land that will enable Lessee to drill and operate the retained well or wells. The Commission shall prescribe a reasonable rental, not to exceed the initial rental payable under Lease Royalty and Rent Section 2, Provision 3, and other reasonable terms and conditions for operation of the retained wells. Royalty shall be calculated per Lease Royalty Section 2, Provision 3. If the Lease is canceled, Lessee shall have a reasonable time within which to remove any property owned or used by Lessee in connection with its operations under the Lease, and shall comply with the restoration and removal conditions of this Lease.

15. WAIVER OF BREACH

The Commission's waiver of any breach or default shall not constitute a waiver of any other breach or default of the same or any other provision of this Lease, regardless of the Commission's knowledge of the other breaches or defaults. The Commission's acceptance of monies from Lessee shall not constitute a waiver of any preceding breach or default, other than the failure of Lessee to pay the particular monies accepted, regardless of the Commission's knowledge of the preceding breach or default at the time of its acceptance of the monies. Acceptance of monies by the Commission after Lease termination of the shall not constitute a reinstatement, extension

or renewal of the Lease or revocation of any notice or other act by the Commission.

16. SOLVENCY

If at any time during the term of this Lease, Lessee is insolvent under the federal bankruptcy laws, makes a voluntary assignment of its assets for the benefit of creditors, or is adjudged as bankrupt either upon Lessee's voluntary petition in bankruptcy or upon the involuntary petition of Lessee's creditors, the Commission shall have all the rights and privileges afforded it by federal bankruptcy laws to protect its interests under this Lease.

17. ASSIGNMENT AND SUBLETTING

- A. Lessee may assign or transfer this Lease or any interest it may have in this Lease and may sublet all or part of the Leased Land as provided in Public Resources Code sections 6804 and 6925. The Commission's approval, which shall not be unreasonably withheld, to an assignment, transfer or sublease may be conditioned upon, among other things, the Commission's participation in any consideration received by Lessee or its successors in interest for the assignment, transfer or sublease if this participation is deemed by the Commission to be in the State's best interests. The consent to any assignment, transfer or sublease shall not be deemed as consent to any subsequent assignment, transfer or sublease. Any assignment, transfer or sublease made without the Commission's consent, whether voluntary or by operation of law, shall be of no effect and shall be a breach that gives to the Commission the right to cancel this Lease. Lessee may subcontract, without Commission approval, parts of the work to be performed under this Lease so long as Lessee remains responsible to the Commission for the work that is subcontracted. Upon approval by the Commission of any assignment, transfer or sublease, the Assignee, Transferee or Sublessee shall be bound by the terms of this Lease to the same extent as if such Assignee, Transferee or Sublessee were the original Lessee, any conditions in the assignment, transfer or sublease to the contrary notwithstanding. Lessee shall submit to Commission staff documentation of any acquisition, merger, name change, corporate reorganization or any other organizational restructuring that affects the entity that holds this Lease.
- B. For purposes of this Assignment and Subletting, any transaction or conveyance, or series of transactions or conveyances occurring within 6 consecutive months, regardless of form or structure, that results in the transfer of either a controlling interest in Lessee or a 50 percent or greater

ownership interest in any business entity owning a controlling interest in Lessee, shall be deemed an assignment or transfer of the Lease for which Commission approval is required. A controlling interest in Lessee is 35 percent or more of: (i) the voting stock of the Lessee if it is a corporation; (ii) the general partnership interest if the Lessee is a general or limited partnership; or (iii) the membership interest if the Lessee is a limited liability company.

18. QUITCLAIM

The Lessee may make at any time a written quitclaim or relinquishment of all rights under this Lease or of any portion of the Leased Land as provided in Public Resources Code sections 6804.1 and 6914. Upon acceptance by the Commission, the quitclaim or relinquishment shall be effective when it is filed with the Commission, subject to the continued obligation of the Lessee and its surety to pay all accrued rentals and royalties, to abandon all wells drilled into or through the Leased Lands to be quitclaimed or relinquished in a manner approved in writing by the Commission and to restore such lands in accordance with the approved CalGEM regulations and standards. However, the quitclaim or relinquishment shall not release Lessee or its surety from any liability for breach of any obligation of this Lease with respect to which Lessee is in default at the time the filing of the quitclaim.

19. SURRENDER OF PREMISES OR LEASE TERMINATION

If Lessee is not the surface owner at the expiration or sooner termination of this Lease, Lessee will indemnify the Commission from all liability from all actions or omissions of Lessee in connection with the abandonment and surrender of the surface estate; provided, however, the Commission reserves the right to require Lessee to abandon properly all wells and drill sites on the Leased Land or lands serving the Leased Land in a manner approved in writing by the Commission and CalGEM. Such wells and drill sites shall be abandoned within the time specified by the Commission, and at the expense of Lessee. This provision shall survive the termination of the Lease.

20. RESTORATION

Within 12 months after the expiration, surrender or termination of this Lease, Lessee shall (a) plug and abandon any geothermal wells on or into the Property in accordance with applicable Law (b) remove from the Leased Lands any other facilities owned or installed by Lessee thereon (c) level and fill in all sump holes and mud pits and (d) leave the land surface free from debris. The Commission may approve a plan of restoration that varies from

these requirements. Lessee shall have a continuing easement to enter the Property for such purpose during such 12 month period.

21. FORCE MAJEURE

The obligations imposed upon Lessee by this Lease may be suspended during the time Lessee is prevented from complying with them by wars, strikes, riots, acute and unusual labor or material shortages, acts of God, or such other unusual conditions that are beyond the control of Lessee. In order for any obligation imposed upon Lessee to be suspended, Lessee must inform the Commission in writing as soon as possible that a condition warranting suspension has arisen. Lessee shall inform the Commission in writing as soon as possible when such condition ceases to exist.

22. POSSESSORY INTEREST TAX

Lessee recognizes and understands in accepting this Lease that it may be liable for the possessory interest tax imposed by the city or county on its leasehold.

23. SEVERABILITY

If any provision of this Lease is judicially determined to be invalid, it shall be considered deleted from the Lease and shall not invalidate the remaining provisions.

[SIGNATURES ON NEXT PAGE]

CALIFORNIA STATE LANDS COMMISSION

Date

By: _____
Name: _____
Title: _____

LESSEE*
GEYSERS POWER COMPANY, LLC

Date

By: _____
Name: _____
Title: _____

*In executing this document, the following are required:

Corporations:

1. Affix Corporate Seal.
2. Attach certified copy of the resolution or other document authorizing its execution on behalf of the corporation.

Individuals:

1. Attach acknowledgment of Signature.