

**CALENDAR ITEM
C84**

A 25

09/01/11

W 40954

S 18

R 00611

J. Adams

**CONSIDER APPROVAL OF A STATE GEOTHERMAL
RESOURCES PROSPECTING PERMIT,
INYO COUNTY**

APPLICANT:

Deep Rose Development LLC
Attn.: Mr. Charles E. Harris
809 Broadway, Suite 3
Sonoma, CA 95476

AREA, LAND TYPE, AND LOCATION:

Approximately 640 acres of State fee-owned school lands, Inyo County, as described in Exhibit A and depicted in Exhibit B (attached hereto).

BACKGROUND:

Sections 6904 and 6910 of the Public Resources Code (PRC) allow the California State Lands Commission (Commission) to issue permits for exploration of geothermal resources on lands belonging to the State, where such lands have not been selected by the Commission for lease by competitive public bid. Geothermal Resources Prospecting Permits are intended for lands where the existence and nature of the geothermal resource are not well known. The Commission issued more than 90 such permits from 1960 through 1984. Exploration for geothermal resources on State lands was relatively stagnant for the next two decades as cheaper sources of power reduced interest in geothermal energy projects; however, in recent years there has been a marked increase in exploring for geothermal in response to State mandates for increased generation from renewable sources, and the availability of development incentives.

CALENDAR ITEM NO. **C84** (CONT'D)

In 2006, the Commission issued a two-year prospecting permit for the subject parcel to Deep Rose, LLC (Deep Rose). Deep Rose attempted to secure funding for access road improvements and exploratory drilling, but was unsuccessful. In 2008, Deep Rose entered into a partnership with a company possessing financial resources to form Deep Rose Geothermal 16, LLC. The Commission approved assignment of the permit to the new entity and approved extension of the term by two years, as allowed by Public Resources Code section 6910(b). The partnership dissolved in 2009 before exploratory drilling could be undertaken, and the permit expired in 2010.

APPLICATION FOR NEW PERMIT:

Deep Rose has created a new limited liability company, Deep Rose Development, LLC (Applicant), and has submitted an application for a new geothermal resources prospecting permit. The Applicant is confident that exploratory drilling activities will be undertaken during the term of the permit.

PROSPECTING PERMIT INSTEAD OF COMPETITIVE LEASING:

In 1978, the California Legislature modified the Public Resources Code to create a flexible leasing program for geothermal resources to promote more rapid and extensive geothermal development on State lands. The Legislature recognized that different parcels of State lands have varying degrees of potential for successful development. Some parcels might display strong indications of geothermal resources and likelihood of commercially producible energy. Those parcels could be let through competitive leasing. Other parcels have some potential but need additional exploration. Still other parcels have never been explored.

The subject parcel is located within the Coso Hot Springs Known Geothermal Resource Area (KGRA), as defined by the Federal Geothermal Steam Act of 1970 (Title 30, Chapter 23, Section 1001 (e)), and is approximately five miles from the 260-megawatt Coso Geothermal Field. The Steam Act defines a KGRA as *“an area in which the geology, nearby discoveries, competitive interests, or other indicia would, in the opinion of the Secretary [of the U.S. Department of the Interior], engender a belief in men who are experienced in the subject matter that the prospects for extraction of geothermal steam or associated geothermal resources are good enough to warrant expenditures of money for that purpose.”*

However, inclusion of a parcel within a KGRA does not mean geothermal resources are present in commercial quantities. The geothermal potential of the subject parcel must be considered prospective because there are no surface manifestations evident, and the nearest productive geothermal well is more than five miles away. The California Division of Oil, Gas, and Geothermal Resources

CALENDAR ITEM NO. **C84** (CONT'D)

(DOGGR) considers any well drilled more than one mile from a producing well to be exploratory. The subject parcel is considered unsuitable for competitive leasing because of its small size. Therefore, a prospecting permit is considered to be the appropriate mechanism to provide for the exploration of the subject parcel.

PROSPECTING PROGRAM AND SCHEDULE:

The Applicant has submitted a prospecting program and time schedule consisting of the drilling and testing of one or more geothermal wells during the term of the permit. No other geological or geophysical exploration methods are planned, as the Applicant believes geothermal resources may exist at great depth beneath the State parcel based on knowledge about the subsurface geologic structure in the region as it relates to the Coso geothermal field to the southeast.

Geothermal exploration often includes methods such as measurement of gravity, near-surface resistivity, and near-surface heat flow. Heat flow is measured by drilling relatively-shallow holes, typically 500 to 2,000 feet deep. Such information would be useful for selecting a site for a deeper geothermal well. The Applicant has already selected a site based on regional geologic information. Commission staff agrees with the Applicant that other exploration techniques would not yield useful information and that a deep well is the best way to determine the presence of commercially valuable geothermal resources and measure the production potential.

PERMIT PROVISIONS:

1. Exclusive right to prospect for geothermal resources in permitted area for a term of two years, subject to an extension of two additional years at the discretion of the Commission.
2. Preferential right to a geothermal lease upon discovery of geothermal resources in commercial quantities. The permittee must inform the State, within 90 days of discovery, of its intent to exercise this right. Issuance of a geothermal lease is subject to approval by the Commission acting in its discretion under section 6371 of the Public Resources Code and upon review of environmental documentation on the impacts of a proposed plan of development and production operations.
3. Annual rent, payable in advance, of \$1 per acre for the first year, \$5 per acre for the second, and \$25 per acre for the third and fourth, if extended.

CALENDAR ITEM NO. C84 (CONT'D)

4. A prospecting program consisting of the drilling and testing of one or more geothermal wells during the term of the permit.
5. Reimbursement of the State's costs for inspection to verify compliance with environmental and operational restrictions.
6. Performance bond or other security in the amount of \$50,000.
7. If a preferential geothermal lease is issued, the lessee shall pay an annual rent of \$10 per acre, and royalties of 12.5 percent (12.5%) for geothermal resources and 5 percent (5%) for minerals and chemicals recovered from the resources. The value of the geothermal resources for royalty purposes shall be determined from either a sales contract or a percentage of the value of electrical power generated from the resource, both of which are subject to prior approval by the Commission. The value of the minerals or chemicals shall be determined from their sale in first marketable form.

STATUTORY AND OTHER REFERENCES:

- A. Public Resources Code: Division 6, Parts 1 and 2; and Division 13.
- B. California Code of Regulations: Title 2, Division 3; and Title 14.

OTHER PERTINENT INFORMATION:

1. A Mitigated Negative Declaration SCH# 2005121125 was prepared by the Division of Oil, Gas, and Geothermal Resources (DOGGR) and adopted on March 28, 2006, for this project. The California State Lands Commission's staff has reviewed such document. A Mitigation Monitoring Program was adopted by DOGGR.
2. This activity involves lands identified as possessing significant environmental values pursuant to Public Resources Code section 6370, et seq., but such activity will not affect those significant lands. Based upon the Commission staff's consultation with the persons nominating such lands and through the CEQA review process, it is the staff's opinion that the project, as proposed, is consistent with its use classification.

EXHIBITS:

- A. Land Description
- B. Location Map
- C. Mitigation Monitoring Program (MMP)

CALENDAR ITEM NO. **C84** (CONT'D)

RECOMMENDED ACTION:

It is recommended the Commission:

CEQA FINDINGS:

1. Find that a Mitigated Negative Declaration SCH# 2005121125 and a Mitigation Monitoring Program were prepared by DOGGR and adopted on March 28, 2006, for this project and that the Commission has reviewed and considered the information contained therein.
2. Adopt the Mitigation Monitoring Program as contained in Exhibit C, attached hereto.

SIGNIFICANT LANDS INVENTORY FINDING:

1. Find that this activity is consistent with the use classification designated by the Commission for the land pursuant to Public Resources Code section 6370, et seq.

OTHER FINDINGS:

1. Find that conditions exist for the issuance of a geothermal resources prospecting permit pursuant to Public Resources Code sections 6904 and 6910, in that the lands do not display strong indications of geothermal resources, require additional exploration, and are therefore unsuitable for leasing.
2. Find that a geothermal resources prospecting permit pursuant to Public Resources Code section 6910 is in the best interests of the State.

AUTHORIZATION:

1. Authorize issuance of a geothermal resources prospecting permit on file in the Long Beach office of the Commission to Deep Rose Development, LLC, covering the lands described in Exhibit A, attached hereto.
2. Authorize the Executive Officer or his designee to execute any documents necessary to implement the Commission's actions.