

**CALENDAR ITEM
C68**

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N. Diunugala

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

APPLICANT:

Entiv Organic Energy LLC
Attn.: Mr. James Buchal
3425 SE Yamhill, Suite 100
Portland, OR 97214

AREA, LAND TYPE, AND LOCATION:

Approximately 520 acres of 100 percent reserved mineral interest in State School Lands in Siskiyou County, as described in Exhibit A and depicted in Exhibit B (attached hereto). The surface of the parcel is owned by U.S. Fish and Wildlife Service (USFWS) and is part the Lower Klamath National Wildlife Refuge (NWR).

BACKGROUND:

Sections 6904 and 6910 of the Public Resources Code allow the California State Lands Commission (Commission) to issue permits for exploration of geothermal resources on lands belonging to the State. The permits are intended for lands where the existence and nature of the geothermal resource are not well known.

Entiv Organic Energy LLC (Entiv), a domestic Limited Liability Company registered in the State of Oregon, is evaluating the possibility of generating electric power from low-temperature geothermal water from a State-owned reserved mineral interest parcel and adjacent Federal land on the California side of the Klamath Basin, within the Lower Klamath NWR.

In response to a water crisis in the Klamath Basin in 2001, the USFWS allowed several wells to be drilled within the NWR to locate water. Rather than producing ordinary fresh water, the wells drilled produced high-temperature water. The USFWS allowed Entiv to flow-test the wells in 2011 and evaluate the resource

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potential. Entiv determined the water temperature is sufficient to produce electricity, perhaps 3 megawatts or more, through a new technology. The USFWS is encouraging the development and utilization of this hot water because it needs a source of more economical power to pump water for habitat improvement. However, before an electricity generating facility can be designed, more information is needed. Entiv proposes to deepen one of the wells to confirm the flow potential and the temperature of the hot water reservoir. The well deepening would be conducted with a small, truck-mounted rig. The small generating facility, if proposed, would likely be sited on adjacent federal land.

PROSPECTING PROGRAM AND SCHEDULE:

Entiv has submitted a satisfactory prospecting program and time schedule. An existing water well, drilled in 2001 and located on an existing drill site, will be deepened from 600 feet to approximately 2,000 feet. The well will be flow-tested to evaluate resource characteristics and assess commercial capability. The time schedule for completion of the program coincides with the term of the permit, but the actual work could be accomplished in matter of days or weeks.

PERMIT PROVISIONS:

1. Exclusive right to prospect for geothermal resources in permitted area for a term of two years.
2. Preferential right to a geothermal lease upon discovery of geothermal resources in commercial quantities.
3. Annual rent, payable in advance, of \$1 per acre for the first year. Rent increases to \$5 per acre at the beginning of the second year.
4. Performance bond or other security in the amount of \$20,000.00.
5. If the permit is later converted into a preferential geothermal lease, an annual rent of \$10 per acre, and royalties of 12.5 percent (12.5%) for geothermal resources and 5 percent (5%) for any minerals or chemicals recovered. Value of the geothermal resources for royalty purposes will be determined from either a sales contract or a percentage of the value of electrical power; and value of the minerals or chemicals 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.

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OTHER PERTINENT INFORMATION:

1. The Division of Oil, Gas & Geothermal Resources (DOGGR) is currently evaluating Entiv's application for a Permit to Conduct Geothermal Operations, which Entiv is required to obtain prior to proceeding with the activity. The USFWS owns the surface and has consented to Entiv's proposed drilling.
2. The Applicant qualifies for a prospecting permit under Public Resources Code section 6910 because the geothermal resources found to date are insufficient to support an adequate energy project and because, insofar as the applicant is the only entity permitted by the USFWS to drill from the surface site, a competitive bid is not feasible.
3. Pursuant to the Commission's delegation of authority and the State CEQA Guidelines (Cal. Code Regs., tit. 14, § 15061), the staff has determined that this activity is exempt from the requirements of CEQA as a categorically exempt project. The project is exempt under Class 6, Information Collection; California Code of Regulations, Title 2, section 2905, subdivision (e)(2).

Authority: Public Resources Code section 21084 and California Code of Regulations, Title 14, section 15300 and California Code of Regulations, Title 2, section 2905.

EXHIBITS:

- A. Land Description
- B. Location Map

RECOMMENDED ACTION:

It is recommended the Commission:

CEQA FINDINGS:

Find that this activity is exempt from the requirements of CEQA pursuant to California Code of Regulations, Title 14, section 15061 as a categorically exempt project, Class 6, Information Collection; California Code of Regulations, Title 2, section 2905, subdivision (e)(2).

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 have not been selected by the Commission for leasing by

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competitive bid.

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 Entiv Organic Energy LLC, covering the lands described in Exhibit A, attached hereto, contingent upon Entiv obtaining the required Permit to Conduct Geothermal Operations from the DOGGR no later than July 8, 2012.
2. Authorize the Executive Officer or his designee to execute any documents necessary to implement the Commission's actions.

EXHIBIT A

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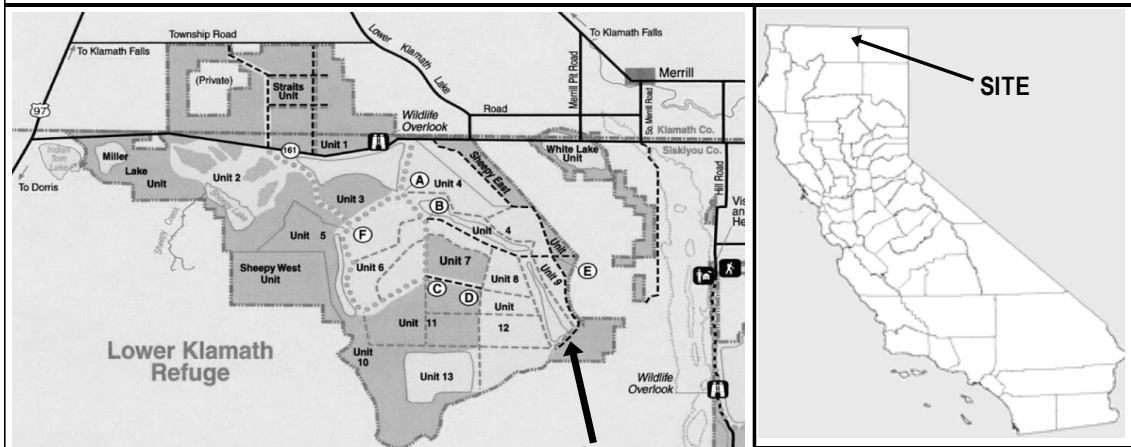
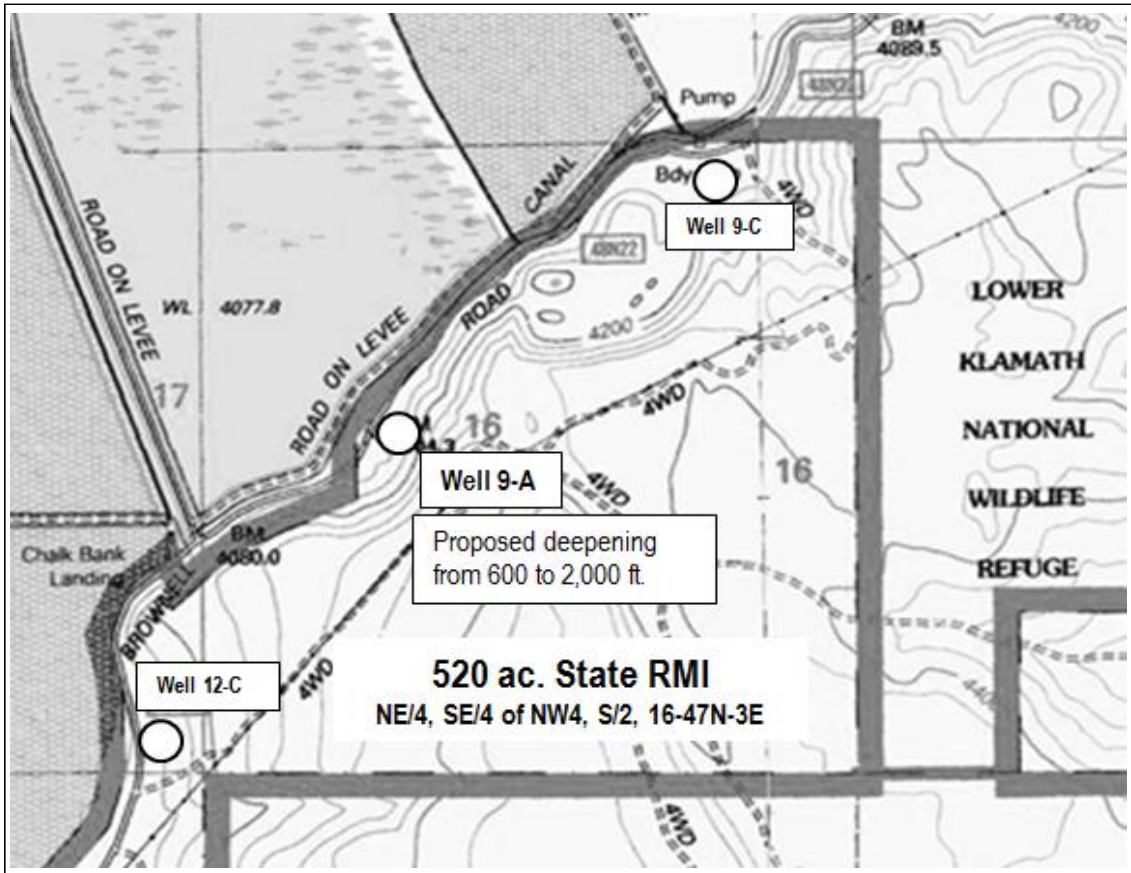
LAND DESCRIPTION

A parcel of California State reserved mineral interest school land consisting of the Northeast Quarter, the Southeast Quarter of the Northwest Quarter, and the South Half of Section 16, Township 47 North, Range 3 East, Mount Diablo Meridian, Siskiyou County, containing 520.00 acres, more or less.

END OF DESCRIPTION

EXHIBIT B

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- Legend**
- Water
 - Refuge boundary
 - Permanent & seasonal marshes
 - Intersection signs (Lower Klamath Refuge)
 - Auto tour routes
 - Paved roads
 - Gravel roads
 - Dike

Exhibit B
Location Map
 Entiv Organic Energy LLC
 Proposed Geothermal
 Resources Prospecting Permit
 SISKIYOU COUNTY

This Exhibit is solely for purposes of generally defining the location and is not intended to be, nor shall it be construed as, a waiver or limitation of any State interest in the subject or any other property.