

**CALENDAR ITEM
C59**

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10/29/10
PRC 8556.2
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D. Dudak

**CONSIDER AMENDMENT OF STATE GEOTHERMAL RESOURCES
LEASE NO. PRC 8556.2 TO PROVIDE FOR FURTHER
DEVELOPMENT, THE GEYSERS GEOTHERMAL FIELD,
SONOMA AND MENDOCINO COUNTIES**

LESSEE:

CPN Wild Horse Geothermal, LLC
Attn.: Mr. Kevin Talkington
10350 Socrates Mine Road
Middletown, CA 95461

AREA, LAND TYPE, AND LOCATION:

Approximately 1,881.43 acres of State 100 percent reserved mineral interest school lands at The Geysers in Sonoma and Mendocino Counties.

BACKGROUND:

State Geothermal Resources Lease No. PRC 8556.2 was issued to WHR, Inc., owner of the surface estate, and then assigned to Geysers Power Company, LLC, both actions effective September 1, 2004. The leased land consists of several non-contiguous tracts identified as Parcels 1, 2, 3, and 4, as depicted on the attached Exhibit A. On April 6, 2010, the lease was assigned by Geysers Power Company to CPN Wildhorse Geothermal, LLC (Lessee). Both are wholly-owned subsidiaries of Calpine Corporation.

The lease has been amended four times. In 2005, an adjacent tract of State reserved mineral interest land was added as Parcel 4, and development drilling was authorized pursuant to Sonoma County Use Permit UP94-760. In 2006, development drilling into Parcels 1, 2 and 3 pursuant to Sonoma County Use Permit UPE05-0114 was authorized. In 2007, the drilling term was extended, the rent was increased, and the drilling requirement was clarified to specify the types of wells that would satisfy this requirement. In 2008, two additional exploratory wells were authorized, pursuant to a categorical exemption under the California Environmental Quality Act (CEQA), from a drill site authorized under Sonoma County Use Permit UPE07-0042.

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The lease was issued with a seven-year primary term, and will terminate with respect to any of the four parcels not producing, or not capable of producing, on September 1, 2011. Lessee has initiated a drilling program to confirm the presence of geothermal steam on State and private leases in advance of using that steam to generate electricity, either at an existing plant or a new plant Lessee might construct in the future. To date, Lessee has drilled or redrilled seven wells into the leased lands, establishing Parcels 1 and 2 as being capable of producing. Another well currently being drilled is expected to establish Parcel 3 as being capable of production. No wells have been drilled into Parcel 4 thus far. Lessee has also drilled or redrilled six wells into adjacent non-State leases, and has begun constructing a pipeline to transport steam from Parcel 1 to an existing power plant.

Lessee holds a second State lease adjacent to the subject lease. Together, the two leases cover 2,281 acres. Neither lease is producing steam at this time. The other Calpine subsidiary, Geysers Power Company, holds five fully-developed State leases covering 4,967 acres. Its leases produce 30 million pounds of geothermal steam per year that is combined with steam from Federal and private leases to generate nearly 1,000 megawatts of electrical power at The Geysers, and roughly \$5 million per year in royalty to the State.

REQUEST FOR AMENDMENT:

Lessee has requested amendment of the lease to allow further development in accordance with Sonoma County Use Permits UPE08-0061 and UPE08-0062. Those use permits were issued in June 2009 for Lessee's plan to expand development of geothermal resources in the northwest portion of The Geysers.

Lessee's expanded project plan covers an area of more than 4,000 acres of State, private, and Federal mineral interests. Substantial portions of the project are already in place and authorized by prior use permits issued by the County. Existing infrastructure includes primary access roads and the majority of drill sites and pipeline corridors. Lessee applied to the County for UPE08-0061 and UPE08-0062 for additional roadways, drill sites, and pipeline routes for the expanded project. The County reviewed potential impacts of those additional features as lead agency under the CEQA.

Lessee now has use permits authorizing up to 26 drill sites, 18 of which are already constructed. Of the additional eight sites that could be constructed, four would be on the leased land. The 26 drill sites could accommodate up to 100 wells, but the actual number of wells needed to develop the area will be significantly less. A reasonable estimate would be 30 producing wells and 10 injection wells for the overall development. Experience in other parts of the field

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suggests the reservoir cannot support a higher density of wells, and it would not be economically feasible for the Lessee to drill more than the estimated number of wells. At present, Lessee intends to transport newly developed geothermal resources to its existing power plants, though it is still considering the possibility of constructing one or more new plants. A new power plant would be subject to further environmental review, with either Sonoma County or the California Energy Commission acting as lead agency.

AMENDMENT TERM:

The amendment will authorize Lessee to drill into the leased land from approved sites and use produced steam in accordance with Use Permits UPE08-0061 and UPE08-0062, provided Lessee abides by conditions, restrictions, and mitigation measures designed to restrict, limit, modify, or minimize the environmental impact of Lessee's operations under the lease as set forth in the environmental documents and conditions of approval associated with those use permits. All other terms and conditions of the lease will remain unchanged.

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. Mitigated Negative Declarations SCH# 2009042009 and 2009042013 were prepared by Sonoma County and adopted on June 12, 2009, and June 26, 2009, respectively, for this project. The California State Lands Commission's staff has reviewed these documents.
2. Mitigation Monitoring Programs were adopted by Sonoma County.
3. This activity involves lands which have NOT been identified as possessing significant environmental values pursuant to Public Resources Code sections 6370, et seq. However, the Commission has declared that all lands are "significant" by nature of their public ownership (as opposed to "environmentally significant"). Since such declaration of significance is not based upon the requirements and criteria of Public Resources Code sections 6370, et seq., use classifications for such lands have not been designated. Therefore, the finding of the project's consistency with the use classification as required by Title 2, California Code of Regulations, section 2954 is not applicable.

EXHIBIT:

- A. Location Map

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PERMIT STREAMLINING ACT DEADLINE:

February 21, 2011 (CSLC acting as a responsible agency under the CEQA)

RECOMMENDED ACTION:

It is recommended that the Commission:

CEQA FINDINGS:

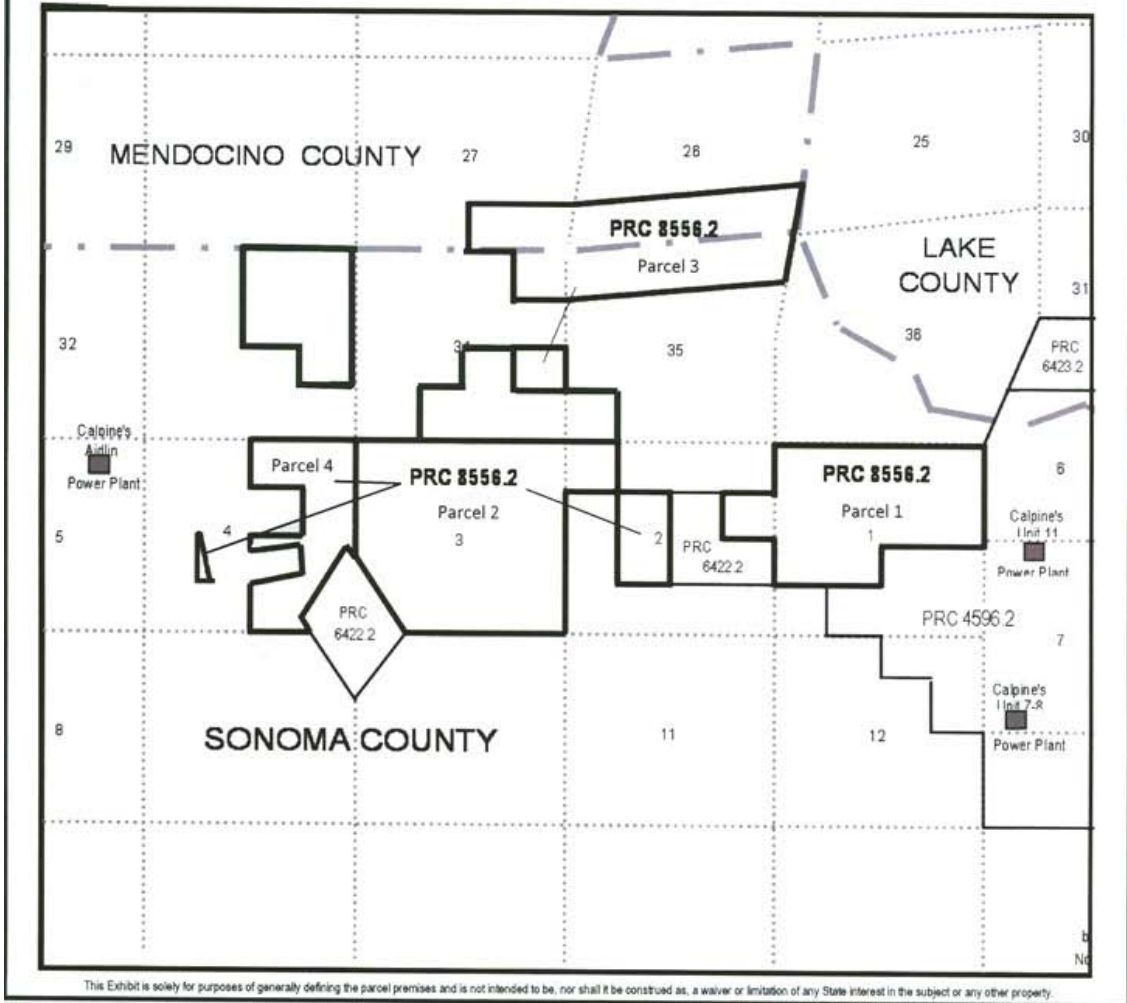
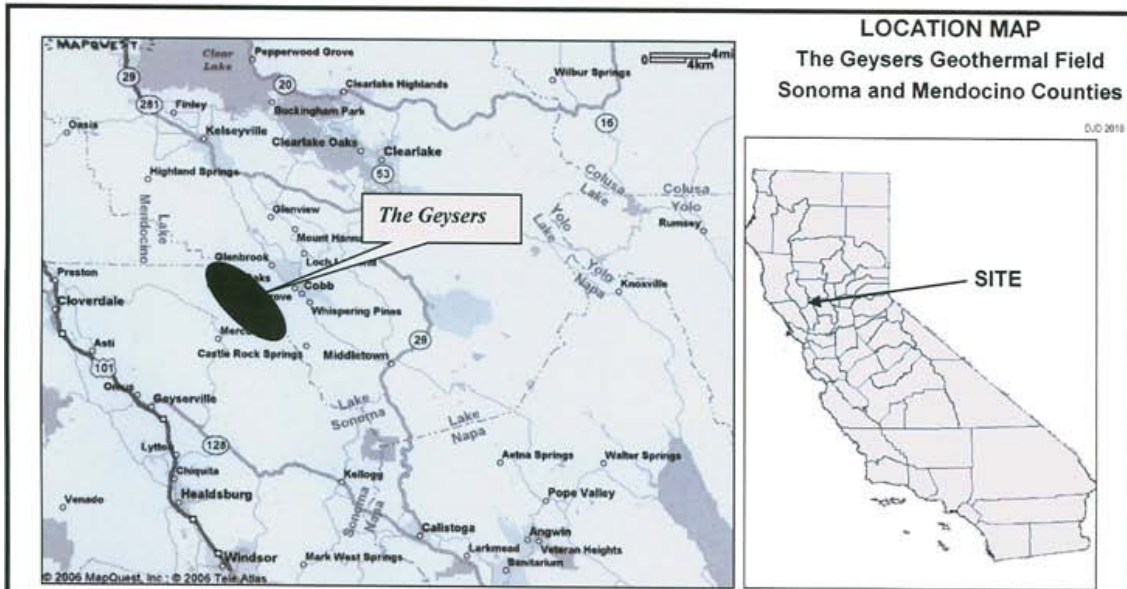
1. Find that Mitigated Negative Declarations SCH# 2009042009 and 2009042013 and Mitigation Monitoring Programs were prepared by Sonoma County and adopted on June 12, 2009 and June 26, 2009, respectively, for this project and that the Commission has reviewed and considered the information contained therein.
2. Adopt the Mitigation Monitoring Programs on file in the Sacramento office of the California State Lands Commission.

AUTHORIZATION:

1. Authorize the Amendment of State Geothermal Resources Lease No. PRC 8556.2, upon the terms and conditions outlined in this calendar item and in the form on file in the Long Beach office of the Commission, to provide for further development on the leased land.
2. Authorize the Executive Officer or his designee to execute any documents necessary to implement the Commission's action.

EXHIBIT A

PRC 8556.2



This Exhibit is solely for purposes of generally defining the parcel premises 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.