

MINUTE ITEM
This Calendar Item No. C83
was approved as Minute Item
No. 83 by the State Lands
Commission by a vote of 3
to 0 at its 11-26-01
meeting.

CALENDAR ITEM
C83

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11/26/01
PRC 7810.2
R08301
J. Adams

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**CONSIDER APPROVAL OF AN ASSIGNMENT OF INTEREST,
A DEFERMENT OF DRILLING OBLIGATION,
AND AMENDMENT OF ROYALTY PROVISION,
STATE GEOTHERMAL RESOURCES LEASE NO. PRC 7810.2,
THE GEYSERS GEOTHERMAL FIELD,
SONOMA COUNTY**

ASSIGNOR:

Calpine Corporation
Attn: Mr. Kevin Talkington
10350 Socrates Mine Road
Middletown, CA 95461

ASSIGNEE:

Geysers Power Company, LLC
c/o Calpine Corporation
Attn: Mr. Kevin Talkington
10350 Socrates Mine Road
Middletown, CA 95461

AREA, LAND TYPE, AND LOCATION:

Approximately 224 acres of 100 percent reserved mineral interest School Land in
The Geysers Geothermal Field, Sonoma County.

BACKGROUND:

State Geothermal Resource Lease No. PRC 7810.2 was issued in 1994 to
Calpine Corporation (Calpine) as a negotiated subsurface (no surface use)
lease. Calpine has requested the California State Lands Commission
(Commission) approve assignment of 100 percent interest in the Lease to
Geysers Power Company, LLC, a subsidiary company wholly-owned by Calpine.

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Geysers Power Company currently holds five State Geothermal Resources Leases totaling approximately 4,500 acres at The Geysers. It also owns 19 of 23 power plant units at The Geysers, which utilize geothermal resources from State, Federal and private leaseholds to generate nearly 1,000 megawatts of electrical power. The subject assignment furthers Calpine's objective to consolidate its geothermal operations at The Geysers under its Geysers Power Company subsidiary.

The drilling requirement provision of the Lease obligated the lessee to commence drilling a well before December 1, 1997. In 1997, the Commission authorized a deferment of the drilling obligation to December 1, 1999. In 1999, the Commission authorized a second deferment to December 1, 2001. As a condition for granting the second deferment, the rental provision of the Lease was amended to increase the annual rent from \$10.00 to \$25.00 per acre.

In conjunction with the subject assignment, the lessee has requested another two-year deferment of the drilling obligation to December 1, 2003. For the right to continue to hold the Lease, the lessee shall compensate the State by increasing the annual rent from \$25.00 per acre to \$50.00 per acre until such time as a well is drilled, reduced thereafter to \$10.00 per acre.

DEFERMENT JUSTIFICATION:

Utilization of geothermal steam resources differs significantly from petroleum or natural gas resources. Oil and gas can be transported great distances and stored. If geothermal steam is not utilized within a mile or two of the well and immediately after being produced, its thermal energy is severely diminished. The only facility that can utilize steam from the Lease is the 20-megawatt Aidlin geothermal power plant owned by the lessee and built on private lands under lease to the lessee.

The Aidlin power plant began operation in 1989 using steam from four producing wells drilled into the Aidlin private lease. Due to a relatively rapid initial decline and mechanical problems in several wells, the lessee had to drill additional wells in 1990, 1992, 1994, and 1995 to maintain the steam production at a level sufficient to generate 20 megawatts. One producing well was later converted to injection. For the past six years, the steam supply has come from seven producing wells whose total flow has remained relatively stable.

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The primary justification for the 1997 drilling deferment was that existing wells were providing a sufficient quantity of steam to run the Aidlin plant at capacity. It was also noted that because of Calpine's limited five percent (5%) ownership interest in the Aidlin project, it could not drill without the approval of its majority partner. In 1999, Calpine's ownership interest at Aidlin increased to 55 percent (55%), but because existing wells continued to supply sufficient steam to run the plant at capacity, a second two-year deferment was requested. Though not part of the justification, it was also noted that drilling into the Lease was complicated by the presence of a parcel of private land situated between the southern portion of the Lease and the Aidlin lease. The parcel was under lease to another company and attempting to drill into the Lease would risk a trespass. Nevertheless, Calpine believed additional steam would be required at Aidlin between 1999 and 2001, and that a new well could and would be drilled into the Lease. It was on this basis that the Commission approved the 1999 deferment.

However, during the past two years, the Aidlin wells experienced a less severe rate of decline than Calpine anticipated, so no additional steam was required. In 1999, the average steam flow was 389,000 pounds per hour, sufficient to generate about 19.4 megawatts. In 2000, the average flow declined to 374,000 pounds per hour, or 18.7 megawatts. In 2001, the average flow declined to 365,000 pounds per hour, or 18.3 megawatts. The lessee believes that only now can the drilling of a well for additional steam be justified based on need and economics. About 35,000 pounds per hour is needed to boost generation to a full 20 megawatts. A new well could likely supply about 50,000 pounds per hour. Plans are now underway for a new well, but because the lessee will not be ready to commence drilling before December 1, 2001, partly due rig availability problems, another deferment is necessary.

The lessee recently acquired a full 100 percent ownership interest in the Aidlin project, and has taken steps to eliminate the potential trespass problem by initiating negotiations for a lease agreement with WHR, Inc., owner of the private property situated between the southern part of the Lease and the Aidlin lease. As a result, the lessee firmly believes it will commence drilling a well into the Lease during the proposed deferment period, most likely during the first quarter of 2002.

STATUTORY AND OTHER REFERENCES:

- A. Public Resources Code Division 6, Parts 1 and 2; Division 13.

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- B. California Code of Regulations Title 3, Division 3; Title 14.
- C. State Geothermal Resources Lease No. PRC 7810.2, Paragraph 4(c), Paragraph 8, and Paragraph 34.

OTHER PERTINENT INFORMATION

- 1. Pursuant to the Commission's delegation of authority and the State CEQA Guidelines [Title 14, California Code of Regulations, section 15060(c)(3)], the staff has determined that this activity is not subject to the provisions of the CEQA because it is not a "project" as defined by the CEQA and the State CEQA Guidelines.

Authority: Public Resources Code section 21065 and Title 14, California Code of Regulations, sections 15060 (c)(3) and 15378.

- 2. Assignment forms and prerequisite filing fees have been paid by Calpine Corporation.

EXHIBIT:

- A. Location Map.

PERMIT STREAMLINING ACT DEADLINE:

N/A

RECOMMENDED ACTION:

IT IS RECOMMENDED THAT THE COMMISSION:

CEQA FINDING:

FIND THAT THE ACTIVITY IS NOT SUBJECT TO THE REQUIREMENTS OF THE CEQA PURSUANT TO TITLE 14, CALIFORNIA CODE OF REGULATIONS, SECTION 15060(c)(3) BECAUSE THE ACTIVITY IS NOT A PROJECT AS DEFINED BY PUBLIC RESOURCES CODE SECTION 21065 AND TITLE 14, CALIFORNIA CODE OF REGULATIONS, SECTION 15378.

AUTHORIZATION:

- 1. CONSENT TO THE ASSIGNMENT OF 100 PERCENT INTEREST IN STATE GEOTHERMAL RESOURCES LEASE NO. PRC 7810.2 FROM CALPINE CORPORATION TO GEYSERS POWER

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COMPANY, LLC, WITH THE ASSIGNEE TO BE BOUND BY ALL THE TERMS AND CONDITIONS OF THE LEASE.

2. APPROVE A DEFERMENT OF THE DRILLING OBLIGATION UNDER STATE GEOTHERMAL RESOURCES LEASE NO. PRC 7810.2 UNTIL DECEMBER 1, 2003, AND INCREASE THE ANNUAL RENT FROM \$25.00 PER ACRE TO \$50.00 PER ACRE DURING THE DEFERMENT PERIOD.
3. AUTHORIZE THE EXECUTIVE OFFICER OR HIS DESIGNEE TO EXECUTE ANY DOCUMENT NECESSARY TO IMPLEMENT THE COMMISSION'S ACTION.

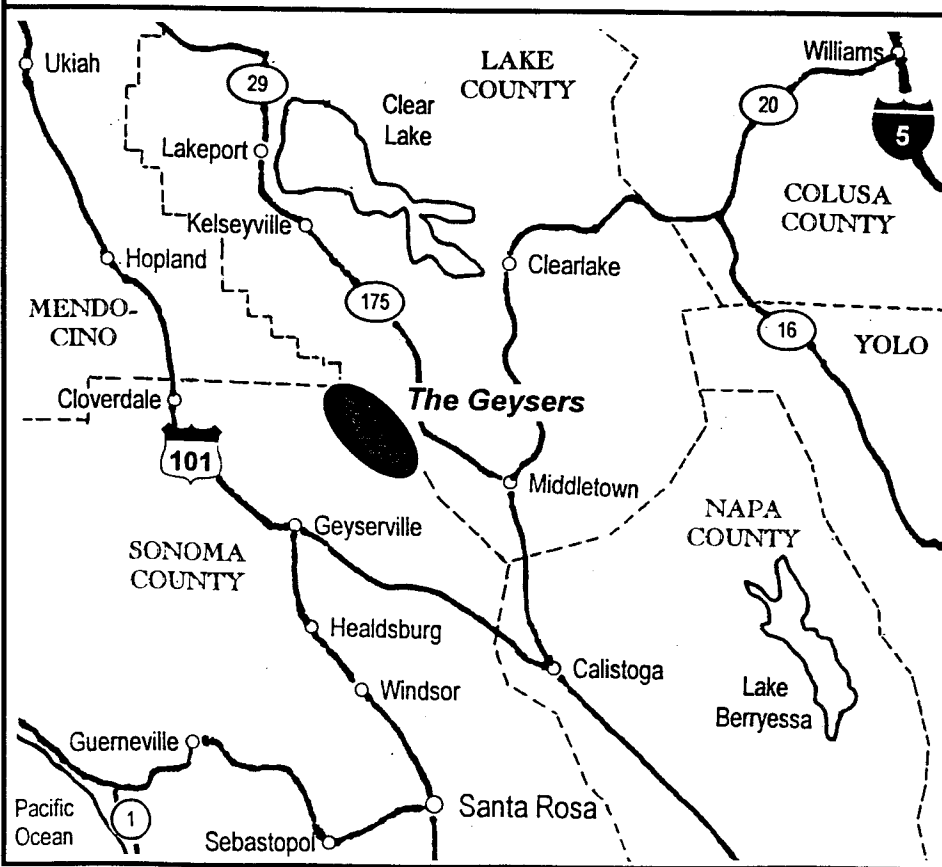
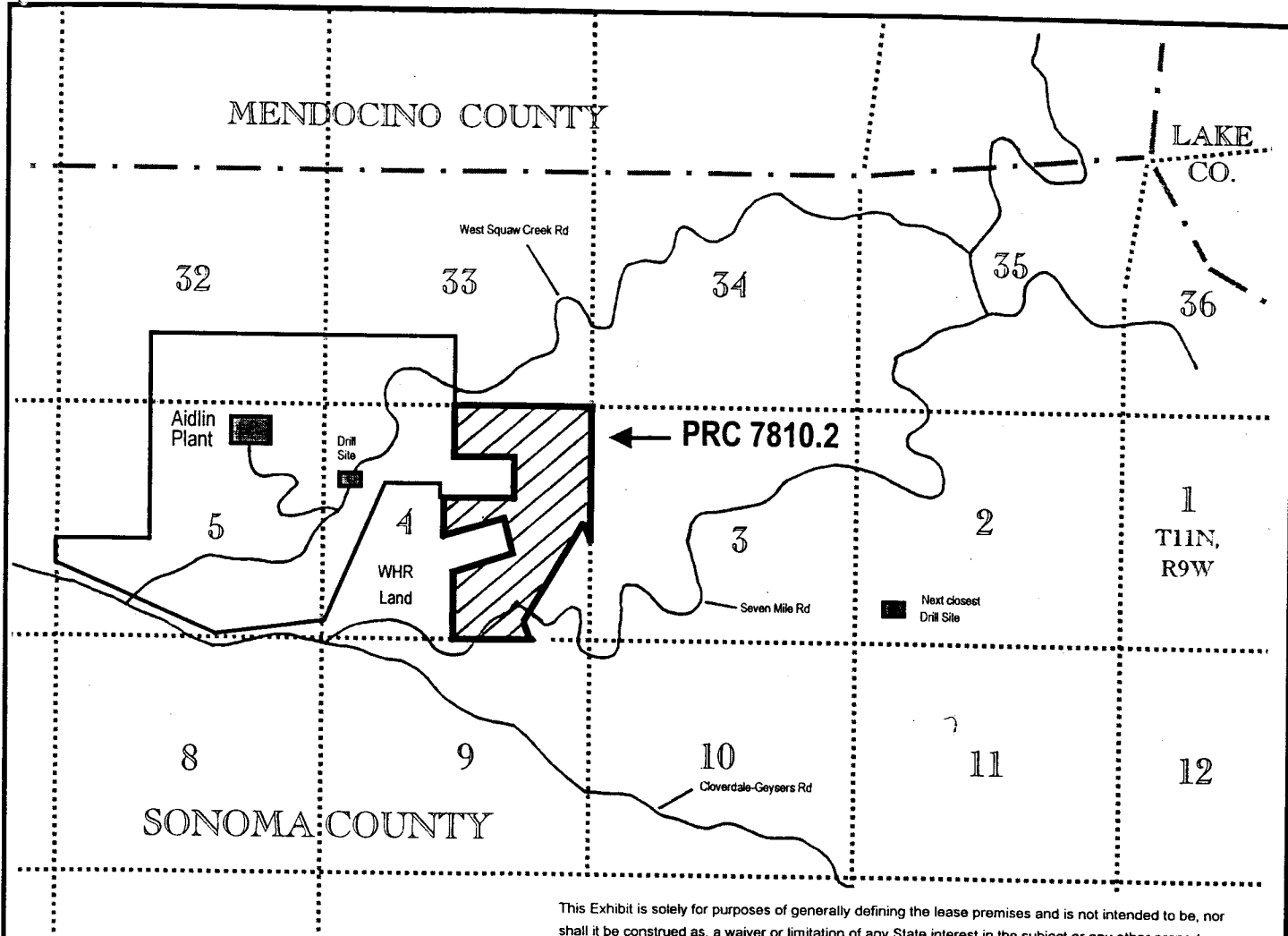


EXHIBIT A
PRC 7810.2

LOCATION MAP
The Geysers Geothermal Field
SONOMA, LAKE, and
MENDOCINO COUNTIES

JWA, 2001

SITE

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