

**CALENDAR ITEM  
C80**

A 2, 4

06/19/14  
PRC 8556.2  
RA 31212  
N. Saito

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**CONSIDER AN AMENDMENT OF  
STATE GEOTHERMAL RESOURCES LEASE NO. 8556.2, PARCEL 3  
TO BE UTILIZED FOR INJECTION RATHER THAN PRODUCTION,  
THE GEYSERS GEOTHERMAL FIELD,  
MENDOCINO AND SONOMA COUNTIES**

**LESSEE:**

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

**AREA, LAND TYPE, AND LOCATION:**

Approximately 480 acres of State 100 percent (100%) reserved mineral interest school lands at The Geysers in Sonoma and Mendocino Counties (Exhibit A, attached hereto).

**BACKGROUND:**

State Geothermal Resources Lease No. PRC 8556.2 (Lease) was issued to WHR Inc., owner of the surface estate, and then assigned to Geysers Power Company, LLC; both actions were 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 from Geysers Power Company to CPN Wild Horse Geothermal, LLC (Lessee). Both are wholly-owned subsidiaries of Calpine Corporations (Calpine).

The Lease was last amended on February 8, 2011, to extend the primary term authorized in 2004 from seven years to 10 years to allow for continued development of the North Geysers expansion project. The individual parcels of the Lease were to terminate if any of the four parcels was not producing or was not capable of producing geothermal resources by September 1, 2014. The Lessee has already drilled wells into Parcels 1, 2, and 4 capable of production to hold those parcels.

CALENDAR ITEM NO. **C80** (CONT'D)

When the steam production at The Geysers peaked in 1987, it was discovered that the reservoir could not “renew” itself of geothermal resources as quickly as it was being depleted. In an attempt to address that concern, the existing two active wells on Parcel 3 began injecting water to help replenish the reservoir and to reduce this trend. Although the two injection wells on Parcel 3 may also be aiding in the production of steam in adjacent State Lands parcels currently under lease, there was not enough evidence for staff to confirm this.

On May 15, 2013, Calpine submitted an application to amend the Lease in relation to Parcel 3 to be utilized for injection rather than production as originally authorized by the California State Lands Commission (Commission) on August 17, 2004. The injection wells have already been part of the previous Commission authorization for drilling and/or re-drilling to find commercially viable geothermal resources. Now, Commission staff is recommending that Parcel 3 to be utilized solely for injection at this time.

The Commission staff reviewed the application and supporting documents and determined that it would be advantageous to allow Parcel 3 to be held by injection. Staff negotiated with Calpine a rent increase for the 480 acres from \$10.00 per acre to \$250.00 per acre or fraction of an acre. This newly increased rent will remain in place for the duration of the injection term of ten (10) years, plus two five (5) year extensions should they be approved in the future by the Commission, or unless and until there is production on this parcel in the future.

Staff recommends an Amendment to Lease No. PRC 8556.2 to provide additional protection of the State’s interest and to reflect this change in utilization and rent. The proposed Amendment to the Lease is on file with the Commission in a form substantially similar to the document attached as Exhibit B. The proposed Amendment also requires Calpine to maintain a lease management fee to cover staff costs associated with lease administration.

Calpine will continue to maintain the bonding and insurance required by the Lease and will be the party responsible for the payment of all rental and royalties due under Lease

**STATUTORY AND OTHER REFERENCES:**

- A. Public Resource Code: Chapter 4 (commencing with section 3700) of Division 3

CALENDAR ITEM NO. **C80** (CONT'D)

**OTHER PERTINENT INFORMATION**

1. The staff recommends that the Commission find that this activity is exempt from the requirements of the California Environmental Quality Act (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 15300 and California Code of Regulations, Title 2, section 2905.

2. This activity involves lands that have NOT been identified as possessing significant environmental values pursuant to Public Resources Code section 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 section 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 California Code of Regulations, Title 2, section 2954 is not applicable.

**EXHIBITS:**

- A. Location Map
- B. Proposed Lease Amendment

**RECOMMENDED ACTION:**

It is recommended that the Commission:

**CEQA FINDINGS:**

1. Find that the activity is exempt from the requirements of CEQA pursuant to California Code of Regulations, Title 14, section 15061 as a categorically exempt project, Class 1, Existing Facilities; California Code of Regulations, Title 2, section 2905, subdivision (a)(2).

**AUTHORIZATION:**

1. Approve the Lease Amendment for State Geothermal Lease No. PRC 8556.2 for utilization of Parcel 3 for injection rather than production with an annual increase in rent to two hundred and fifty

CALENDAR ITEM NO. **C80** (CONT'D)

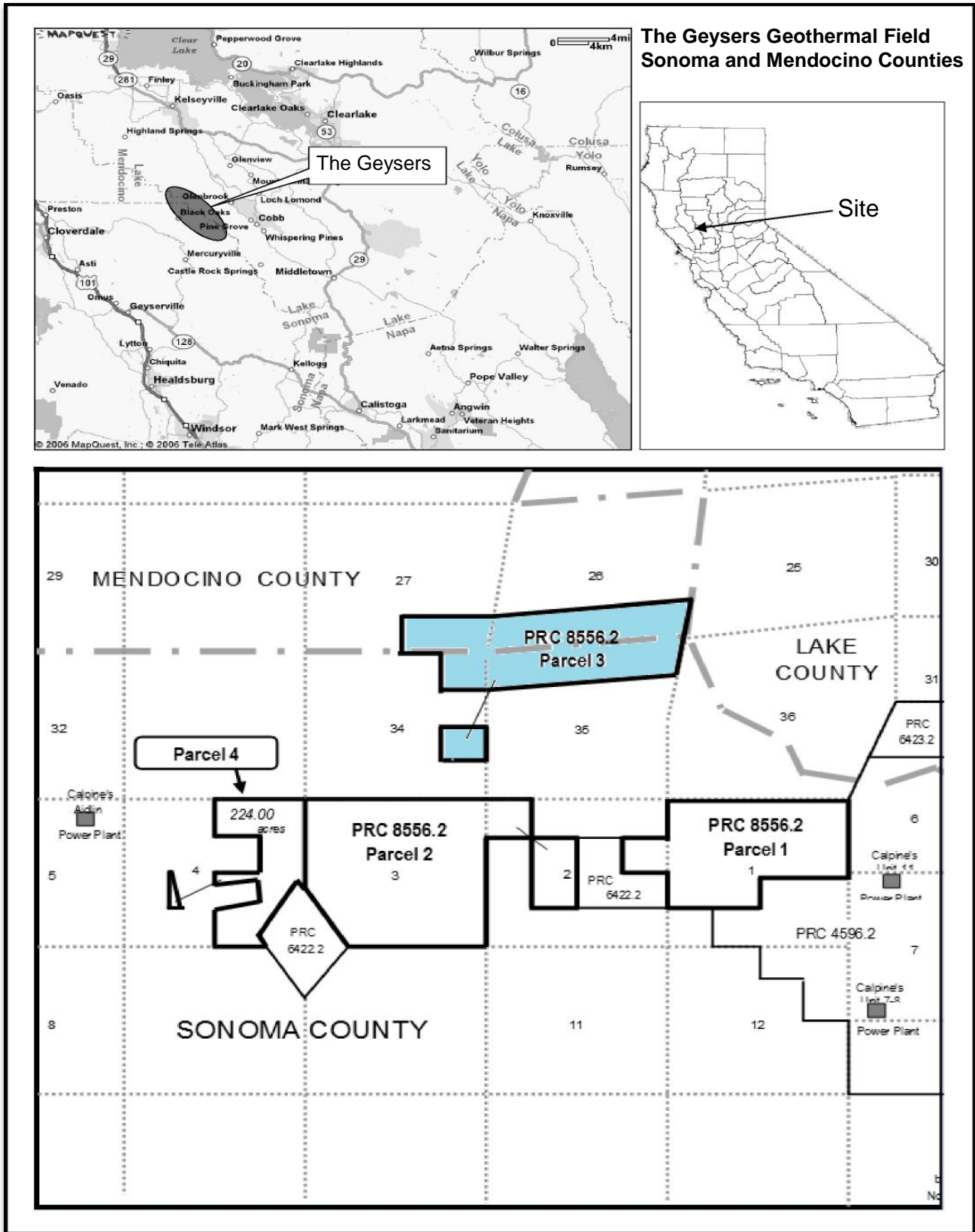
dollars (\$250.00) per acre or fraction of an acre in a form substantially similar to that set forth in Exhibit B of this Calendar Item.

2. Authorize the Executive Officer or her designee to execute any documents necessary to implement the Commission's action.

EXHIBIT A

PRC 8556.2

LOCATION MAP  
Parcel #3



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.

## Exhibit B

PRC 8556.2

### AMENDMENT

#### STATE GEOTHERMAL RESOURCES LEASE PRC 8556.2 SONOMA AND MENDOCINO COUNTIES

This amendment is entered into by and between the State of California, by and through the California State Lands Commission ("State") as Lessor, and CPN Wild Horse Geothermal, LLC ("Lessee").

Whereas, State Geothermal Resources Lease PRC 8556.2 ("Lease") was issued to WHR, Inc., owner of the surface estate, and immediately assigned to Geysers Power Company, LLC, both actions effective September 1, 2004; and, at various times thereafter, modified and amended; and

Whereas State and Lessee now desire to further amend the Lease to utilize Parcel 3 for injection rather than production as more specifically set forth below;

#### **Now, therefore, the State and Lessee do hereby agree as follows:**

Effective the 1<sup>st</sup> day of July 2014, the Lease; as it relates to Parcel 3, shall be amended in the following manner:

1. Subparagraph 1(b) of the Lease, as previously amended effective May 1, 2005, is hereby deleted and replaced with the following:

The Leased Land is subdivided into four parcels designated as Parcel 1, Parcel 2, Parcel 3, and Parcel 4. Except as specifically described in subparagraph 1(d) below, this lease shall terminate with respect to any Parcel that, at the end of the primary term of this lease, is not producing or utilizing, or is not capable of producing or utilizing, geothermal resources in commercial quantities.

2. A new paragraph numbered and titled "1(d): Injection of Geothermal Resources into Parcel 3" is added to this Lease:

1(d)(1) Notwithstanding any other provision of this Lease, State consents to the injection or reinjection of geothermal resources on and into Parcel 3 of the Lease for a period of ten (10) years beginning July 1, 2014 until June 30, 2024. Lessee may, at its option, and subject to the conditions herein, extend the injection/reinjection period for two (2) additional five (5) year periods provided that there are no wells on Parcel 3 producing or capable of producing steam at the end of the initial ten (10) year term. Such extensions shall be subject to re-negotiation of rent and a determination that continued injection is in the best interests of the State.

1(d)(2) Notwithstanding paragraphs 1(b), 1(c) and 8 of this Lease as amended, during any period of injection and/or reinjection as specified in subparagraph 1(d)(1) above, Lessee shall have a right but no obligation to drill an exploratory or production well on or into Parcel 3; provided, however, if Lessee fails to diligently and continuously inject or re-inject geothermal resources for a period of 12 months, then Lessee shall actually spud a new well within 18 months from the date of last injection or re-injection. If Lessee fails to actually spud a new well, then this Lease shall terminate as to Parcel 3 upon receipt of written notice from State. If Lessee drills a well producing or capable of producing geothermal resources during the injection/reinjection period, then this paragraph 1(d) shall no longer be applicable to Parcel 3.

3. Subparagraph 4(c) of the Lease, as previously amended effective May 1, 2005, is hereby deleted and replaced with the following:

For Parcel 1, and Parcel 2, an annual rent, payable in advance, of twenty-five dollars (\$25.00) per acre, or fraction of an acre, for each year or fraction of year that this lease is in effect. If Lessee begins producing geothermal resources in commercial quantities from Parcel 1 and Parcel 2, the annual rent thereafter accruing with respect to Parcel 1 and Parcel 2 shall be reduced to ten dollars (\$10.00) per acre, or fraction of an acre. For Parcel 3, an annual rent payable in advance, of two-hundred fifty dollars (\$250.00) an acre, or fraction of an acre, for each year or fraction of year that this Lease is in effect. If Lessee begins producing geothermal resources in commercial quantities from Parcel 3, the annual rent thereafter accruing in respect to Parcel 3 shall be reduced to ten dollars (\$10.00) per acre, or fraction of an acre. For Parcel 4, an annual rent payable in advance, of fifty dollars (\$50.00) an acre, or fraction of an acre, for each year or fraction of year that this Lease is in effect. If Lessee begins producing geothermal resources in commercial quantities from Parcel 4, the annual rent thereafter accruing in respect to Parcel 4 shall be reduced to ten dollars (\$10.00) per acre, or fraction of an acre.

4. Paragraph 6(a) of the lease is amended to read as follows by adding the first phrase to the Paragraph:

Except as provided in subparagraph 1(d), if the Lease is still in effect, Lessee shall meet with the State as soon as reasonably possible after nineteen (19) years from thirty (30) days after the initial commercial production for the purpose of renegotiating royalties, rentals and other monetary considerations to be applicable for the succeeding 10-year interval. These meetings shall occur at regular 10-year intervals so long as the lease remains in effect.

5. Subparagraph 8(a) as amended effective September 1, 2007 is hereby deleted and replaced with the following:

Except as provided in subparagraph 1(d), Lessee shall commence drilling operations within five (5) years from the effective date of this lease. If Lessee fails to commence such drilling operations before, or to prosecute them diligently after, the expiration of the drilling term, this lease shall terminate. The drilling term may be extended by the State for a period of up to two (2) years based on information provided by Lessee justifying the need for an extension. As provided in Paragraph 14 of this lease, if the Leased Land is included in an approved geothermal unit, the drilling requirement may be satisfied by the drilling requirement of the unit.

6. The following words and numbers shall be inserted into the Lease as Paragraph 41 and titled "REIMBURSEMENT":

Lessee agrees to execute a Standard Reimbursement Agreement with the State for the administration of this Lease PRC 8556.2; subject to a five thousand dollar (\$5,000) per annum cap commencing on July 1, 2014, with automatic annual renewals increasing the cap three percent (3%) per year thereafter. Lessee shall be billed against the cap only for reimbursement of 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 and/or 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 to the rules and regulations of the State currently in effect and those promulgated or amended after the effective date of this Amendment applicable to drilling and production operations in or on the Lease.

All other terms and conditions of Lease are unchanged. As herein amended, the Lease is and shall remain in full force and effect.

**CPN Wild Horse Geothermal, LLC:**

**California State Lands Commission:**

\_\_\_\_\_  
Signature

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Marina Voskanian, P.E.

Division Chief,

Title: \_\_\_\_\_

Mineral Resources Management

\_\_\_\_\_  
Date

\_\_\_\_\_  
Date