CALENDAR ITEM C36

A 1 02/08/11 PRC 8556.2 R 13310 S 2 D. Dudak

CONSIDER AMENDMENT TO EXTEND PRIMARY TERM OF STATE GEOTHERMAL RESOURCES LEASE NO. PRC 8556.2, 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 (100%) reserved mineral interest school lands at The Geysers in Sonoma and Mendocino Counties.

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 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, Lease was assigned from Geysers Power Company to CPN Wildhorse Geothermal, LLC (Lessee). Both are wholly-owned subsidiaries of Calpine Corporation.

Lease has been amended five 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, authorization was added to allow development drilling into Parcels 1, 2 and 3 pursuant to Sonoma County Use Permit UPE05-0114. In 2007, the drilling term was extended, the rent was increased, and the drilling requirement was clarified as to the types of wells satisfying that obligation. In 2008, two additional exploratory wells were authorized pursuant to a categorical exemption of the California Environmental Quality Act (CEQA), from a drill site authorized under Sonoma County Use Permit UPE07-0042. In 2010, Lease was amended to

allow further development in accordance with Sonoma County Use Permits UPE08-0061 and UPE08-0062. Those use permits were issued in June 2009 to cover Lessee's North Geysers expansion project.

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, by September 1, 2011. Lessee has initiated an aggressive 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 or newly constructed power plant. To date, Lessee has drilled or redrilled nine wells into the leased lands, thereby establishing Parcels 1, 2, and 3 as being capable of producing. No wells have been drilled into Parcel 4 thus far. Lessee has also drilled or redrilled eight wells into adjacent non-State leases and is in the final stages of constructing a pipeline to transport steam from Parcel 1 to an existing plant.

Lessee holds a second State lease PRC 8844.2, adjacent to the subject lease. Together, the two leases cover 2,281 acres and are both part of Lessee's North Geysers development plan. PRC 8844.2 became effective September 1, 2009, with a primary term of 10 years. 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 are combined with steam from Federal and private leases to generate nearly 1,000 megawatts (MW) 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 Lease to extend the primary term from seven years to 10 years to allow for continued development of its North Geysers expansion project.

Lessee's 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 through prior use permits issued by Sonoma County. Existing infrastructure includes primary access roads and the majority of drill sites and pipeline corridors. In 2009, Sonoma County, as lead agency for the project, reviewed the potential impacts of project expansion within Lease area in two prior Mitigated Negative Declarations related to issuance of Sonoma County Use Permits UPE08-0061 and UPE08-0062.

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 are located on the leased land. The 26 drill sites could physically accommodate up to 100 wells, but the actual number of wells needed to develop the area is expected to be significantly less. Lessee estimates approximately 30 producing wells and 10 injection wells for the overall development. At present, Lessee intends to transport a portion of the newly developed geothermal resources to its existing power plants. Additionally, Lessee has applied for Conditional Use Permits with Sonoma County for the construction of two new 49 MW power plants to be located in the North Geysers area, with commercial operation expected to occur by December, 2013.

Although lessee may actually drill and confirm a commercial resource in Parcel 4 prior to the end of the primary term on September 1, 2011, extending the term from seven to 10 years, equivalent to the term of adjacent State lease PRC 8844.2, would allow Lessee to continue its activities for the North Geysers expansion project in the most efficient manner possible, and ensure the State's resources are properly and wisely developed. Extension of the term would also coincide with the estimated date for completion of two new power plants.

AMENDMENT TERM:

Lease will be amended to extend the primary term from seven years to 10 years, and will terminate with respect to any of the four parcels not producing, or not capable of producing, by September 1, 2014.

The amendment extending the primary term of Lease will allow the Lessee to continue its development of the North Geysers project and drill into Parcel 4 of the leased land from approved sites and use produced steam in accordance with existing Use Permits. If Lessee does not drill into Parcel 4 and confirm a commercial resource prior to September 1, 2014, Lease will expire with respect to that parcel. All other terms and conditions of Lease will remain unchanged.

STATUTORY AND OTHER REFERENCES:

- A. Paragraph 1 of Lease No. PRC 8556.2.
- B. Public Resources Code: Division 6, Parts 1 and 2.
- C. California Code of Regulations: Title 2, Division 3, Chapter 1.

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. The California State Lands Commission staff has reviewed these documents and finds the impacts resulting from activities proposed to be carried out pursuant to this lease were disclosed and analyzed therein.

- 2. Mitigation and 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

PERMIT STREAMLINING ACT DEADLINE:

July 10, 2011

RECOMMENDED ACTION:

It is recommended that the Commission:

CEQA FINDINGS:

- 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 an extension of the primary term from seven years to 10 years, terminating with respect to any of the four parcels not producing, or not capable of producing, by September 1, 2014.

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

EXHIBIT A PRC 8556.2

