OAK CREEK ENERGY
a Marubeni company

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23 July 2010

California Energy Commission
Dockets Office, MS-4
Docket No. 09 RENEW EO-01
1516 Ninth Street
Sacramento, CA 95814-5512

RE: Renewable Energy Executive Order – Docket No. 09-RENEW EO-01. Comments of Oak Creek Energy Systems, Inc. Regarding the DRECP Draft Interim Mitigation Strategy.

Dear Sir or Madam:

Thank you for the opportunity to comment on the Draft Interim Mitigation Strategy (IMS) for the Desert Renewable Energy Conservation Plan (DRECP). We strongly urge the Renewable Energy Action Team (REAT) to reject the California Department of Fish and Game's selection of a portion of eastern San Bernardino County adjacent to the California/Nevada state line (the "Castle Mountains Keyhole") as one of four Mitigation Target Areas of the IMS. The Castle Mountains Keyhole is inappropriate for designation as a Mitigation Target Area under the IMS/DRECP, for the reasons described below.

1. **Location of the Castle Mountains Keyhole in Relation to the IMS.**

Figure 6 of the IMS depicts the Castle Mountains Keyhole as a Mitigation Target Area marked by three hexagons in eastern San Bernardino County adjacent to the California/Nevada state line. Paragraph "c" of page 18 of the IMS further identifies the Castle Mountains Keyhole as the "San Bernardino County Target Mitigation Area," although it incorrectly states that the Castle Mountains Keyhole lies within the Mojave National Preserve. Only a portion of the area is within the Mojave National Preserve. The rest of the area is located on BLM or private lands.

2. **The Castle Mountains Keyhole is Inappropriate for Designation as a Mitigation Target Area.**

Designation of the Castle Mountains Keyhole as a Mitigation Target Area is inappropriate for the following reasons:

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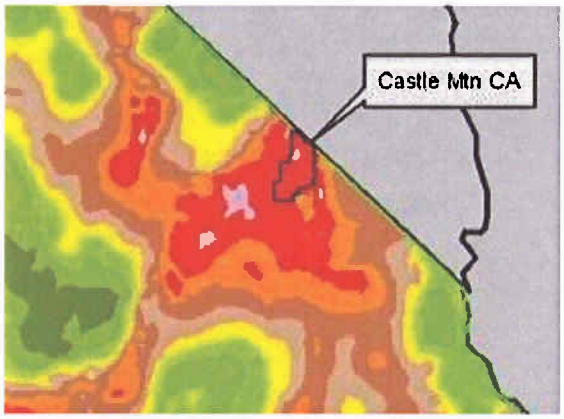
- high wind resource potential;
- prior disturbance, existing road framework, and transmission proximity;
- limited listed species habitat value; and
- its "multiple use" status under FLPMA.

High wind resource potential. The National Renewable Energy Laboratory's latest wind resource map for California – enclosed herein – depicts the Castle Mountains Keyhole as one of the relatively few locations within the boundaries of the DRECP where wind speeds exceed 7.0 meters per second at a height of 80 meters. This makes the Castle Mountains Keyhole an area of high wind resource potential.

Furthermore, within southern California, the areas of highest wind resource potential depicted on Exhibit A have for the most part been developed (e.g., Tehachapis, San Gorgonio Pass). Land use constraints prevent wind energy production on many of the remaining areas containing wind speeds above 7.0 meters per second. The following excerpt from the enclosed map is a good example:



Source: *California – Average Annual Wind Speed at 80 m,* AWS Truewind/National Renewable Energy Laboratory, 15 January 2010 (with Oak Creek Energy Systems, Inc. overlay).

With the exception of those Castle Mountains Keyhole lands depicted in black outline, almost all of the high wind resource potential lands in the excerpt above (reddish orange and lavender = 7.0-8.0 m/s) are off-limits to wind energy production because they are located within the Mojave National Preserve. The Castle Mountains Keyhole is the only substantial portion of this particular wind resource whose land use designations currently allow wind energy development.

It should be noted that foregoing a Mitigation Target Area designation to allow potential wind development would not result in "industrialization" of the entire Castle Mountains Keyhole. Wind development has a unique capacity for sensitive resources avoidance. Utility-scale wind development projects generally disturb between 0.5-1.0 acres per megawatt (MW) of electricity generated, compared to 5-9 acres per MW of electricity generated by a solar facility (an almost ten-fold difference). (*See*, Wind Energy & Birds/Bats Workshop Proceedings, American Wind Energy Association and American Bird Conservancy, May 2004, p. 34; *Solar, Wind and Geothermal Resources and the DRECP*, Center for Energy Efficiency and Renewable Technologies, July 2010, slide 5). And, throughout the lifetime of a wind project, up to 98 percent of its site remains undisturbed and potentially available for conservation. (*20% Wind Energy By 2020*, United States Department of Energy, July 2008, p. 110). Because wind development disturbs a very small portion of a given project site relative to the energy it produces, developers often have a substantial margin within the site to avoid sensitive natural resources.

Prior mining disturbance, existing road network, and transmission proximity. A significant portion of the Castle Mountains Keyhole has been previously disturbed by former open pit heap leach gold mine operations, including an extensive road network that traverses much of the area. Wind energy development of the Castle Mountains Keyhole could use the existing road network and other disturbed areas to reduce the amount of permanently disturbed land. Despite its remote location, the Castle Mountains Keyhole is also located within 8 miles of existing 230 kV transmission line and within 10 miles of an existing 500 kV transmission line. A closer, 230-500 kV line is also being proposed.

Undemonstrated listed species habitat value. The Castle Mountains Keyhole does not include any critical habitat under the federal Endangered Species Act. The California Natural Diversity Database indicates that no federal or California State listed species have been recorded within the Castle Mountain Area. The lack of both critical habitat and recorded listed species indicate that the Castle Mountains Keyhole does not demonstrate the substantial listed species habitat values one would expect for state and federally listed species compensation lands.

Furthermore, paragraph "c" of page 18 of the IMS contains certain substantial inaccuracies regarding the habitat value of the Castle Mountains Keyhole. It states that the area has been designated as critical habitat for Mohave ground squirrel. This is incorrect in two respects. First, the Mohave ground squirrel is listed as threatened by the state of California, but it is not federally listed. While the U.S. Fish and Wildlife Service (FWS) may use a process within the ESA to designate critical habitat for listed species, CDFG does not have a similar process available within CESA. Second, the Mohave ground squirrel range does not extend as far east as the Castle Mountains Keyhole. The eastern extent of the Mohave ground squirrel range

occurs within the boundaries of Fort Irwin, and with the exception of the Apple Valley/Hesperia area, the species does not occur south/east of the Mojave River (roughly the I-15 corridor). The closest known occurrence of Mohave ground squirrel is roughly 80 miles to the west.

Paragraph "c" also states that the Castle Mountains Keyhole is located in an area that represents the eastern terminus of the California Essential Habitat Connectivity (CEHC) model. However, Figure 5 of the IMS shows that the Castle Mountains Keyhole is located outside of the corridors depicted in the CEHC model. Indeed, the Castle Mountains Keyhole is the *only* Mitigation Target Area in Figure 5 that does not connect or fortify any of the CEHC corridors, which further brings into question its value as a Mitigation Target Area. In addition, paragraph "c" discusses corridors that occur on county lands within the Castle Mountains Keyhole, but no such corridors appear in any of the figures of the IMS. Paragraph "c" indicates that a large area of high biological value occurs in the southern portion of the Castle Mountains Keyhole (as determined using the Areas of Conservation Emphasis II (ACE-II) model), which connects the Castle Mountains Keyhole with adjacent connectivity corridors. Such corridors do not appear in any figures of the IMS.

Multiple use status as under FLPMA. Most of the Castle Mountains Keyhole consists of public lands managed by the BLM. REAT's management decisions regarding the Castle Mountains Keyhole therefore should be anchored to BLM's multiple use mandate, as outlined in Section 103(c) of the Federal Land Policy & Management Act of 1976:

> The term "multiple use" means the management of the public lands and their various resource values so that they are utilized in the combination that will best meet the present and future needs of the American people ... [this includes, among other elements] a combination of balanced and diverse resource uses that takes into account the long-term needs of future generations for renewable and nonrenewable resources...

This is not to state that all BLM-managed lands should be set aside for renewable energy production. But, with regard to BLM lands within the DRECP, priority should be given to renewable resources in previously disturbed areas of limited listed species habitat value. The Castle Mountains Keyhole is one of those places.

3. Conclusion.

To conclude, we urge REAT not to designate the Castle Mountains Keyhole as a Mitigation Target Area under the IMS/DRECP. It would be

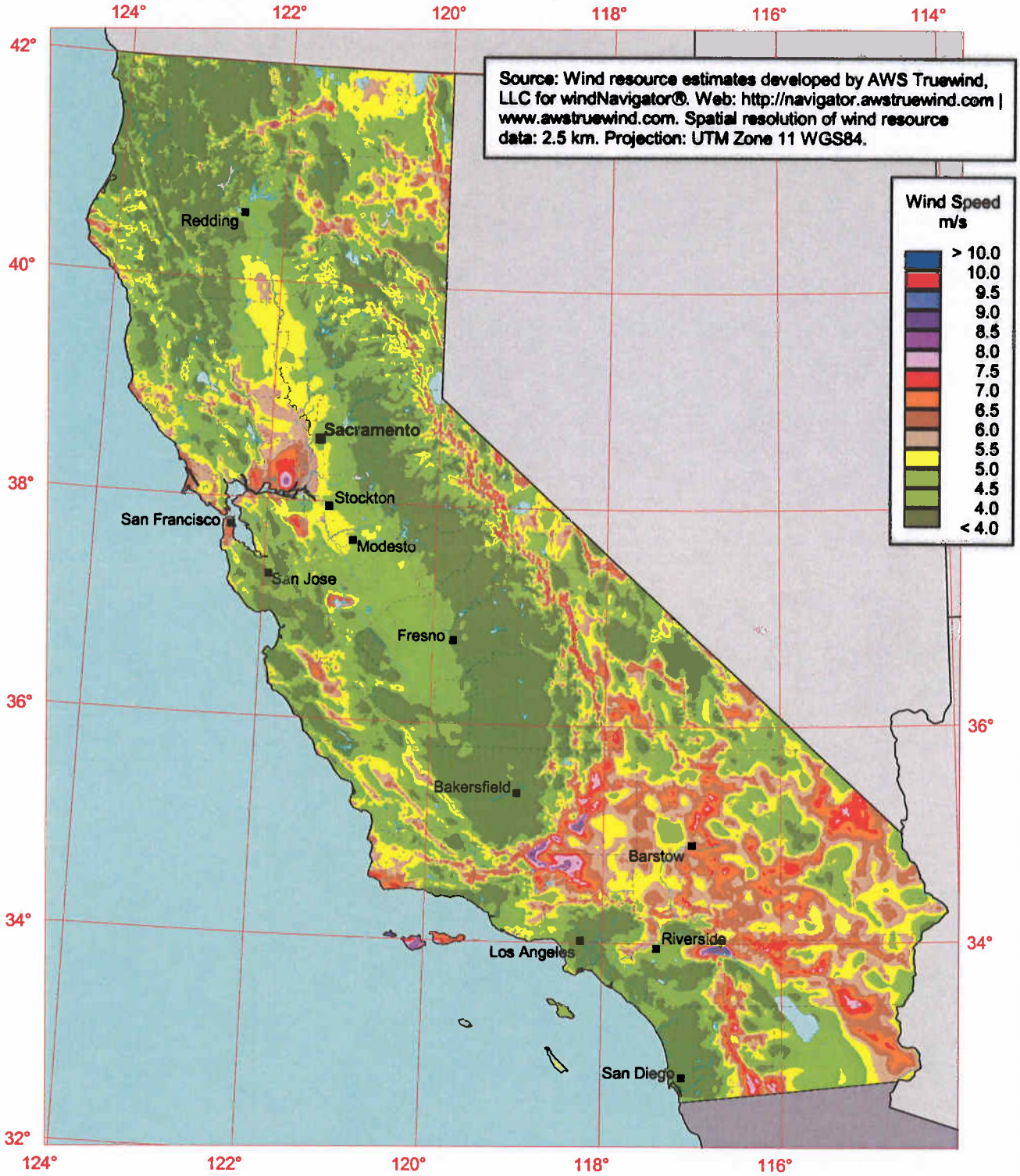
inappropriate to set aside the area as mitigation land when a significant portion of it is already disturbed, when it includes an existing road network, is located in proximity to high voltage transmission lines, and is of undemonstrated listed species habitat value. That being said, an area as large as the Castle Mountains Keyhole likely contains sensitive biological resources. But the area's high potential for wind development warrants a "hard look" at biological resources at the wind project level, rather than preemptively foreclosing its wind development potential altogether on the basis of a cursory programmatic review.

Sincerely,

J. Edward Duggan
Executive Vice President
Oak Creek Energy Systems, Inc.

Enclosure

California - Annual Average Wind Speed at 80 m



100 0 100 200 300 Kilometers

50 0 50 100 150 200 Miles

AWS Truewind

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