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February 5th, 2008

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DOCKET	
07-AFC-1	
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Subject: Application For Certification (07-AFC-1) of VICTORVILLE 2 HYBRID POWER PROJECT

On behalf of Defenders of Wildlife (“Defenders”) and our more than half a million members and supporters in the U.S., 200,000 of which are in California, I am writing to provide comments on the Energy Commission’s Preliminary Staff Assessment (PSA) for the Victorville 2 Hybrid Power Project. Defenders is dedicated to protecting all wild animals and plants in their natural communities. To this end, Defenders employs science, public education and participation, media, legislative advocacy, litigation, and proactive on-the-ground solutions in order to impede the accelerating rate of extinction of species, associated loss of biological diversity, and habitat alteration and destruction.

Before commenting on the impact of this proposed project to wildlife and biological resources, Defenders would like to stress that we strongly support the emission reduction goals found in AB 32, including the development of renewable energy in California. However, we urge that in the quest for renewable power that project proponents design their projects in the most sustainable manner possible. This includes everything down to project site selection. This is essential to ensure that project approval moves forward expeditiously and in a manner that does not sacrifice our fragile desert landscape and wildlife in the rush to meet our renewable energy goals. Indeed, we do have concerns over the potential impacts to listed species and other associated desert habitat and water quality.

Defenders of Wildlife finds it difficult to fully analyze the degree to which the project addresses impacts on wildlife due to the fact that “staff is awaiting additional information on likely mitigation details related to desert tortoise and Mohave ground squirrel as will be determined when the federal Biological Opinion, and state Incidental Take Permit are completed and accepted. Therefore, additional measures may be required to ensure that impacts to biological resources are mitigated to less than significant levels” (pp. 75 of PSA)”.

In particular, we note that outstanding items needed for the Final Staff Assessment included:

- a. Mitigation details and habitat compensation ratios, which were missing in the Biological Assessment, but would be included in the Biological Opinion and Incidental Take Permit;
- b. Agency input regarding the need for tortoise exclusion fencing along Colusa Road, Helendale Road, and Adelanto Road;
- c. Details on the applicant’s proposed agency-approved desert plant relocation areas and plant adoption centers/programs.

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We list our most important concerns under subject headings for the remainder of this document, beginning with general concerns which get more specific further on.

1. Ability to fully mitigate in question

The draft Biological Assessment does not specify proposed mitigation ratios, acreages, or locations of proposed mitigation lands. Yet the Victorville 2 Hybrid Power Project would impact the following plant communities: Mojave desert scrub, desert saltbush scrub, Mojavean juniper woodland and scrub. In addition, Victorville 2 would impact special-status plant and animal species known to occur on site or in the project vicinity.

The PSA states, “Compliance with the federal and state Endangered Species Acts (ESA), biological resources Conditions of Certification, and other laws, ordinances, regulations, and standards (LORS) discussed in the staff assessment *would likely mitigate Victorville 2’s impacts to biological resources*. However, staff is awaiting additional information on likely mitigation details related to desert tortoise and Mohave ground squirrel as will be determined when the federal Biological Opinion, and state Incidental Take Permit are completed and accepted by USFWS and CDFG respectively. Therefore, additional measures may be required to ensure that impacts to biological resources are mitigated to less than significant level.” *Defenders of Wildlife strongly questions this statement because we are not convinced that the project has the ability to fully mitigate, given that the document itself states that “Limited availability of sufficient, suitable, and contiguous mitigation land is likely to pose significant challenges to mitigating cumulative impacts to biological resources in the region (pp. 1-7).* Successful desert tortoise and Mohave Ground Squirrel mitigation depends upon the project reconciling this very problem, which seems doubtful according to its own statements. More on species-specific impacts is discussed later on in this document.

The applicant has indicated that mitigation would occur “...according to regulatory agency guidelines and conform to the long-term biological reserve design identified in the West Mojave Plan”. We would like to stress that when mitigation occurs, DFG determines mitigation ratios based on: (1) presence of the species; (2) habitat quality; (3) disturbance level of habitat; (4) adjacent land uses; (5) connectivity; and (6) projected growth. Defenders of Wildlife would like to see any analysis of mitigation ratios address the above 6 parameters. We will be analyzing both quantity of habitat proposed as well as quality, stressing avoidance or otherwise minimization of impacts to biological resources. Cumulative impact analysis must take into account past, present, and probable future projects that have related impacts to the resource. CEQ Regulations for NEPA (Section 1508.27) require that the significance of actions be analyzed in several contexts such as society as a whole, the affected region, the affected interest, and the locality. Clearly the adjacent Fremont-Kramer Desert Wildlife Management Area three miles away falls within the ‘affected region’ parameter.

2. A false sense of impact

a. Defining impact from a landscape or ecosystem-based perspective

The document states that “The proposed project site is not subject to any Habitat or Natural Community Conservation Plan or within the boundaries of any wildlife preserve or critical habitat Area”. Yet CEQA Guidelines, 15125 (a) state that project impacts should be analyzed relative to their effects on *off-site habitats*. Specifically, this includes public lands, open space, adjacent natural

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habitats, and riparian ecosystems. Impacts to wildlife corridors, including access to undisturbed adjacent areas should also be fully evaluated'. It is crucial to note that the project is within the boundaries of the West Mojave Plan Area and more importantly that Fremont-Kramer Desert Wildlife Management Area (DWMA) is located just three miles north of the project and is co-located with desert tortoise critical habitat. Seeing as this project lies so close to a DWMA and has the potential to interrupt wildlife migration pathways, Defenders of Wildlife expects to see a 3:1 mitigation ratio for lands disturbed so close to a wilderness area with wildlife such as the desert tortoise on it.

b. Critical Habitat

Critical habitat is a term defined by the federal ESA that refers to areas designated by the USFWS that are essential for the conservation of threatened or endangered species and may require special management and protection (USFWS 2005). The USFWS has designated critical habitat for a number of species in the project vicinity:

- Critical habitat for the southwestern willow flycatcher is located within approximately 150 feet of portions of the Segment 1 transmission line route.
- Critical habitat for the desert tortoise is located approximately three miles north of the power plant site.
- Critical habitat for the arroyo toad is located approximately 3.5 miles southeast of the end of Segment 3 of the transmission line route

The determination of whether a project has a significant effect on biological resources is based on the best scientific and factual data that staff could review for the project. Significant biological resource impacts would occur if special-status species, such as state- or federal-listed species, state fully protected species, candidates for state or federal listing and/or Species of Special Concern, are likely to be impacted from the construction or operation of the proposed project. This is clearly the case for the desert tortoise and potentially the Mohave Ground Squirrel (pending a newer survey), two of Defenders' focal species in the desert. Our specific concerns will now be addressed below.

3. Desert Tortoise Impacts

The expected negative effects for the desert tortoise from this project include:

- a. Greater loss of habitat for desert tortoise: Victorville 2 would further decrease the undeveloped acreage available in the area that is available for special-status species such as the desert tortoise through loss of Mojave creosote bush scrub at the power plant site that currently provides suitable habitat.
- b. Loss of connectivity/further impediments to wildlife movements: The Bureau of Land Management's Fremont-Kramer Desert Wildlife Management Area (DWMA) is located three miles north of the project and is co-located with desert tortoise critical habitat. Moreover, The Bureau of Land Management (BLM) estimated that public land adjacent to the project contained as many as 20 desert tortoises per square mile in 1984 (Victorville 2007a/ Section 6.3.4.1.3). Indeed, the dispersal of individuals between local populations is

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- important for maintaining gene flow, supplementing small or declining populations, and recolonizing local populations lost to extinction events (Jackson and Griffin, 1998).
- c. Impacts from increased road traffic: roads lead to direct and indirect impacts on desert tortoise including roadkill mortality, destruction of burrows, dispersion of invasive plants, predators, development, recreation, and possibly disease (Boarman 2002). Roads and highways tend to fragment wildlife habitat and reduce the movement of animals through the landscape (Tsunokawa and Hoban 1997, Evink 2002). Road kill is the greatest human-caused source of direct mortality to vertebrate wildlife in the United States with an estimated one million vertebrates killed per day on roads in America (Forman and Alexander 1998, Kline and Swan 1998). The cumulative impact of habitat fragmentation on desert tortoise is exacerbated by roads and the amount of habitat that they degrade (Boarman 2002).
 - d. Increased vehicular speeds: staff estimates approximately six miles of new paving on roads. Paving roads generally facilitates increased driving speeds, which may not allow enough time for vehicles to stop or safely swerve to avoid collisions with slow-moving wildlife such as the state and federally listed desert tortoise. Given these anticipated effects, it is particularly disturbing to Defenders of Wildlife that the applicant has not proposed tortoise-exclusion fencing along the roads which are to be paved.
 - e. Impacts to vegetation and rare plants from the power plant's air emissions.
 - f. Construction issues: power plant construction could result in direct and indirect impacts to the tortoise due to habitat loss or injury/fatality of individuals. Indeed tortoise presence on site was confirmed by protocol-level surveys (Victorville 2007a/ Section 6.3.4.1.3, Moore 2007). In the construction staging area a total of 50 acres of Mojave creosote bush scrub would be removed, and direct impact is considered permanent due to the length of time required for vegetation to re-establish. Because these areas provide habitat to the desert tortoise there would be significant impacts to biological resources during the establishment and use of the proposed construction staging area.

As the PSA notes, the applicant had not yet submitted a translocation plan; however, when tortoises need to be moved on site at the project, Defenders of Wildlife would like to stress that we do not believe that translocation in and of itself provides adequate mitigation. Instead, any translocation must be in conjunction with the preservation of habitat. Further, the Translocation Plan will need to comply with the recommendations of the FWS 1994 Desert Tortoise Recovery Plan, including

- a) No experimental translocations into Desert Wildlife Management Areas ("DWMAs").
- b) Translocations should be made to appropriate habitat; the EIS/FSA will need to define the habitat to be used and justify this selection.
- c) Areas into which desert tortoises are to be relocated should be surrounded by a desert tortoise-proof fence or similar barrier. The fence will contain the desert tortoises while they are establishing home ranges and a social structure.
- d) The best translocations into empty habitat involves desert tortoises in all age classes, in the proportions in which they occur in a stable population. What is the population structure in this area?
- e) The number of desert tortoises introduced should not exceed the pre-decline density.

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- f) All potential translocatees should be medically evaluated in terms of general health and indications of disease, using the latest available technology, before they are moved.
- g) If desert tortoises are to be moved into an area that already supports a population—even one that is well below carrying capacity—the recipient population should be monitored for at least 2 years prior to the introduction. Necessary data include the density and age structure of the recipient population, home ranges of resident desert tortoises, and general ecological conditions of the habitat. Any translocation sites should be isolated by a desert tortoise barrier fence or similar barrier next to the highway or road. The purpose of fencing the highway is obvious—to keep translocated animals from being crushed by vehicles on the road. The project application is unclear about the level and extent of fencing.

When fencing is proposed, Defenders of Wildlife is pleased to see that there are plans for regular maintenance and monitoring of permanent desert tortoise-exclusion fencing on a monthly basis. In addition, we would like to state that the risk level for a desert tortoise encountering a breach in the fence is greatest in the spring and fall, particularly around the time of precipitation including the period during which precipitation.

Defenders of Wildlife is pleased to see plans to develop a raven control plan. We want to stress that this plan should include a cumulative effects analysis that addresses past, present, and future projects. Any additional water sources will be placed on site it could increase raven populations within the surrounding area. The plan should have clearly defined biological goals and quantifiable criteria to evaluate the ability of various alternatives to meet the program goals. We attach our raven-desert tortoise brochure as a quick reference for you to read on the impact the birds can have on desert tortoises, as well as for preventative measures that can be taken to reduce raven numbers.

4. Mohave Ground Squirrel Impacts

a. Need for more trapping:

There was 2006 trapping done which yielded no Mohave Ground Squirrels. However, since clearance is only good for one year, there will need to be another survey performed. It is also critical to note that last year a Mohave Ground Squirrel was caught on a neighboring parcel adjacent to this property (Leitner, pers Comm, UTM's available on request). It was an adult male at found at two locations 300 meters apart on the east side of Helendale road. The habitat where the male was caught has similar habitat characteristics to the proposed project's land. The Department of Fish and Game and the California Energy Commission already consider a positive sighting here as ample evidence of presence. We therefore expect to see a mitigation ratio of 3:1.

b. Inability to mitigate?

Loss of Mohave ground squirrel habitat is of particular concern due to its relatively small range and the uncertainty of population movements in the area (Leitner, pers Comm.). Victorville 2 would further decrease the undeveloped acreage available in the area that is available for the Mohave ground squirrel. Mojave creosote bush scrub at the power plant site provides suitable habitat for the Mohave ground squirrel. Loss of acreage could be mitigated by the project, but habitat fragmentation concerns have the potential to remain as cumulative residual impacts depending on the location, quality, and quantity of

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available mitigation lands. It is important to note that is already a highly fragmented landscape. The staff assessment itself states that “The project owner will secure appropriate habitat compensation as determined in the Endangered Species Act consultation process and implement the mitigation measures identified in Biological Resources Section”. Given the limited range of the Mohave Ground Squirrel, Defenders of Wildlife questions the ability of the applicant to fulfill this requirement. Moreover, seeing as a cumulative impact analysis must take into account past, present, and probable future, it is significant to note that the greatest losses to urbanization in Mohave Ground Squirrel habitat have been in and adjacent to the cities of Palmdale/Lancaster, **Victorville**/Adelanto/Hesperia/Apple Valley, and Ridgecrest (MGS Conservation Strategy, 2005).

c. Construction

In the construction staging area a total of 50 acres of Mojave creosote bush scrub would be removed, and this direct impact is considered permanent due to the length of time required for vegetation to re-establish. Because these areas provide habitat to the Mohave ground squirrel, there would be significant impacts to biological resources during the establishment and use of the proposed construction staging area. As noted from the Mojave Ground Squirrel Conservation Strategy, “Creosote Bush Scrub is the most wide-spread of the broad community types within the range of the Mohave ground squirrel, and also tends to have the greatest production of annual plants. (MGS Conservation Strategy, 2005). Therefore, it is not surprising that this is the community type in which the Mohave ground squirrel is most often found. This species inhabits flat to moderate terrain and generally avoids steep slopes and rocky terrain” (Leitner 1980, Leitner and Leitner 1989). Indeed, to further underscore this point the proposed construction site is on flat land. Given the fact that: (1) according to the MGS Conservation strategy, the proposed area is already virtually absent of Mohave Ground Squirrels and (2) the area has habitat features preferred by Mohave Ground squirrel, such as creosote bush scrub, Defenders of Wildlife feels that a mitigation ratio of 3:1 should occur for the loss of this valuable habitat on an already stressed population, should they be found on site.

d. Hybridization

Another threat facing this species is hybridization with Round-tailed Ground Squirrels. According to Dr. Phil Leitner, (pers. Comm., 2007) Round-tailed Ground Squirrels thrive best in disturbed habitat. This project will therefore open up a niche the Round-tailed Ground Squirrels are more likely to exploit, in that they favor disturbed habitat. Defenders of Wildlife therefore sees the habitat destruction threat as one that may be indirectly linked to future genetic problems for the species.

5. Birdlife

The applicant observed several special-status migratory bird species, including the Costa’s hummingbird, Le Conte’s thrasher, bald eagle, and loggerhead shrike. Direct impacts due to loss of foraging habitat can be expected. In addition, non-native grassland and developed/disturbed areas provide nesting habitat for ground-nesting birds (Victorville 2007a/ Section 6.3.4.1.3). The loss of active bird nests or young is regulated by the federal Migratory Bird Treaty Act and Fish and Game Code section 3503. These impacts are significant, and the applicant needs to avoid and minimize impacts to nesting birds on the power plant site.

6. Water Quality

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Water quality in the Mojave River could be impacted by discharge of toxic materials released during construction, or migration of any existing toxic materials present in the subsurface soils and groundwater into stormwater runoff from the project site. During and after construction, drainage and sedimentation control measures must be implemented to limit the discharge of potentially contaminated sediment from the site.

In conclusion, Defenders of Wildlife sees significant challenges for the applicant to fully mitigate for the biological costs associated with the proposed project. Given that 'Limited availability of sufficient, suitable, and contiguous mitigation land is likely to pose significant challenges to mitigating cumulative impacts to biological resources in the region', Defenders will be watching closely as to not just the quantity, but the quality and location of proposed mitigation lands when they are released to the public.

Sincerely,

Mike Skuja
California Representative
Defenders of Wildlife

Kim Delfino
California Program Director
Defenders of Wildlife

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