THE DESERT TORTOISE COUNCIL

P. O. Box 3273
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December 18, 2009

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07-AFC-5	
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Via Email and Federal Mail

John Kessler
Project Manager
California Energy Commission
1516 Ninth Street
Sacramento, California 95814-5512

Re: Ivanpah Solar Electric Generating System (07-AFC-5)

Dear Mr. Kessler:

The Desert Tortoise Council is a private, nonprofit organization made up of professionals and lay-persons who share a common interest in wild desert tortoises and the environment they depend upon, and a common commitment to advancing the public's understanding of the desert tortoise and the importance of conserving and recovering this threatened species. The Council, based on its review of the Final Staff Assessment/Draft Environmental Impact Statement (FSA/DEIS), believes that the construction of the proposed Ivanpah Solar Electric Generating System (ISEGS) would conflict with the goals of the *Desert Tortoise Recovery Plan* (1994) to conserve and recover the Mojave Desert Tortoise and would contribute to the likely extirpation of the Northeastern Mojave (NEMO) Desert Tortoise Recovery Unit in the Ivanpah Valley. The Desert Tortoise Council recommends, therefore, that the California Energy Commission select the "No Project/No Action Alternative" with respect to the Application for Certification from BrightSource Energy.

Conflicts With the Recovery Plan

The Mojave Desert Tortoise was listed as a "threatened species" under the Endangered Species Act in 1990 because of the precipitous decline in desert tortoise numbers due largely to human-caused mortality and the destruction and fragmentation of desert tortoise habitat. The construction of ISEGS as proposed by BrightSource Energy will directly contribute to the continued decline of the Mojave Desert Tortoise because 4,073 acres of occupied, high-quality desert tortoise habitat will be permanently lost and because adjacent habitat will be degraded and fragmented.

The ISEGS vicinity is Bureau of Land Management (BLM)-designated Category I Desert Tortoise Habitat, per the "*California Statewide Desert Tortoise Management Policy*," and is more recently recognized as Category I Desert Tortoise Habitat in the BLM's Northern and Eastern Mojave (NEMO) Plan Amendment to the California Desert Conservation Area Plan. While the ISEGS site is not within a Desert Wildlife Management Area (DWMA), the *Desert Tortoise Recovery Plan* identifies habitat outside DWMAs like the ISEGS area as providing corridors for genetic exchange and dispersal of desert tortoises among DWMAs. As early as the Preliminary Staff Assessment for ISEGS, California Energy Commission staff recognized that the non-lakebed portion of the Ivanpah Valley

is excellent desert tortoise habitat and that the "...ISEGS project area provides high quality habitat for this species, with low levels of disturbance and high plant species diversity" (2008, 5.2-30).

The construction of ISEGS would further conflict with the *Desert Tortoise Recovery Plan* goals because the project is likely to result in the death of any number of tortoises in conjunction with the relocation and translocation of animals from the proposed site. At least 38 percent of the monitored tortoises in the 2008 Fort Irwin translocation, for instance, expired. As the Desert Tortoise Scientific Advisory Committee concluded at its meeting of March 13, 2009, "...translocation is fraught with long-term uncertainties...and should not be considered lightly as a management tool." Even small-scale translocations have had mortality rates in excess of 20 percent.

The importance of the tortoise population at Ivanpah must not be under valued. The annual replacement rate within stable populations of the desert tortoise is estimated to be only about two percent; therefore, adult tortoises must be protected to ensure optimal recruitment of new individuals into the population. This is essential in the northern Ivanpah Valley as the tortoises there are part of NEMO Desert Tortoise Recovery Unit and this population is declining. The most recent *Range-Wide Monitoring Report* (2009) shows that current densities of tortoise within NEMO – at an average of 1.7 animals per square mile – are the lowest among the six Recovery Units recognized in the *Recovery Plan.* It is not surprising, then, that Kevin Hunting of the Department of Fish and Game writes in his letter of October 27, 2009 to the California Energy Commission:

> The Department believes this known population of desert tortoise in its natural habitat within the northern portion of Ivanpah Valley, but outside a DWMA, may be valuable to the recovery of the species for the same reasons stressed in the Recovery Plan.

Extirpation of Desert Tortoise

The recent history of the desert tortoise is that entire populations have been extirpated in numerous areas of the Mojave region due to the cumulative impacts of human activities, and the Desert Tortoise Council is deeply concerned that the cumulative impacts of ISEGS and the numerous energy projects planned for the Ivanpah Valley may lead to the extirpation of the Northeastern Mojave (NEMO) Desert Tortoise Recovery Unit population in the Ivanpah Valley.

The developments that raise our concern are all proposed for construction within the NEMO Recovery Unit, one of the six Desert Tortoise Recovery Units designated in the *Desert Tortoise Recovery Plan.* These populations were previously and appropriately identified based on genetics, behavior, ecology, geographic isolation, and morphology. Since the Recovery Plan was published, a number of studies have compared tortoises between different Recovery Units and confirmed biological differences among the populations. Most recently, "*A Genetic Assessment of the Recovery Units for the Mojave Population of the Desert Tortoise...*" (Murphy, et. al. 2007) presents new evidence that desert tortoises in the Recovery Units constitute distinct populations, confirming the validity of the 1994 Plan's six Recovery Units. Each of these evolutionary significant population units faces a distinct suite of past and ongoing impacts to tortoises and supporting habitat.

The potential cumulative impacts to desert tortoises and supporting habitat within the Northeastern Mojave Recovery Unit land area is alarming. Direct, indirect and cumulative impacts of the proposed ISEGS project on the desert tortoise include habitat destruction and loss of habitat, take of the NEMO population, population fragmentation, and compromised viability. Should the ISEGS project, the DesertXpress High-Speed Passenger Train, the upgrade of the 35-mile Eldorado-Ivanpah Transmission line, and the proposed OptiSolar (First Solar) power project all become a reality, impacts to the habitat supporting tortoises in this recovery unit may be insurmountable and could endanger this distinct tortoise population. These cumulative impacts are even more staggering when the facilities proposed by Nextlight Renewable Power on 7,840 acres of high quality tortoise habitat in the eastern Ivanpah Valley are factored in.

Simply stated, the future of the Ivanpah Valley desert tortoise population is at risk. The Desert Tortoise Council, therefore, recommends that the California Energy Commission select the "No Project/No Action Alternative" with respect to the BrightSource Energy Application for Certification.

We request that this letter be entered into the record of the California Energy Commission's Evidentiary Hearings on the ISEGS project.

Sincerely,

Glenn R. Stewart, Ph.D.
DTC Board of Directors

References

California Energy Commission. "Preliminary Staff Assessment. Ivanpah Solar Electric Generating System Application for Certification (07-AFC-5) San Bernardino County." December 2008.

Desert Tortoise Recovery Team, U.S. Fish and Wildlife Service. *Desert Tortoise (Mojave Population) Recovery Plan.* Portland: U.S. Fish and Wildlife Service, 1994.

Murphy, R.W., K. H. Berry, T. Edwards, and A.M. McLuckie. "A Genetic Assessment of Recovery Units for the Mojave Population of the Desert Tortoise, Gopherus Agassizi." *Chelonian Conservation and Biology* 6, no. 2 (2007): 229-251.

U. S. Fish and Wildlife Service. *Range-Wide Monitoring of the Mojave Population of the Desert Tortoise: 2007 Annual Report.* Reno, Nevada: Desert Tortoise Recovery Office, U.S. Fish and Wildlife Service, 2009.