

## Memorandum

Date: January 12, 2009  
Telephone: (916) 654-4679

To: Commissioner Jeffrey Byron, Presiding Member  
Commissioner James D. Boyd, Associate Member

From: California Energy Commission – John Kessler, Project Manager  
1516 Ninth Street  
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<b>DOCKET</b> <b>07-AFC-5</b>
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DATE	<u>01/12/10</u>
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RECD.	<u>01/12/10</u>
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**Subject: CDFG's DRAFT DESERT TORTOISE MITIGATION OPTIONS -  
IVANPAH SOLAR ELECTRIC GENERATING SYSTEM (07-AFC-5)  
Exhibit 310**

Energy Commission staff is providing for the record a summary of California Department of Fish and Game's draft desert tortoise mitigation options for the Ivanpah Solar Electric Generating System.

The draft summary includes information on general areas in which the applicant could consider land acquisition for habitat preservation, and a list of potential specific management measure options.

Docket (07-AFC-5)  
Webworks  
POS (electronic)

PROOF OF SERVICE (REVISED 11/23/09) FILED WITH  
ORIGINAL MAILED FROM SACRAMENTO ON 1/12/10  
**MS**

**From:** "Scott Flint" <sflint@dfg.ca.gov>  
**To:** "Dick Ratliff" <Dratliff@energy.state.ca.us>, <jkessler@energy.state.ca.us>  
**Date:** 1/12/2010 11:48 AM  
**Subject:** Ivanpah SEGS Mitigation Options Table from 12-30-2008  
**Attachments:** ISEGS Mitigation Options (DFG 123008)\_SAFv2.doc

John:

I was asked by the hearing officer to provide the table I discussed in my testimony yesterday. It contains information on general areas in which to consider acquisition, and a list of potential specific management measure options.

We have been working in good faith continuously with the applicant and permitting agencies since third quarter 2008 to outline feasible mitigation and provide a method to secure their obligations to provide them cost certainty, based on these recommendations, which are consistent with those in the CEC FSA and those being considered by BLM.

Susan Sanders advised that she also provided this information in her rebuttal testimony.

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**DRAFT Desert Tortoise (DT) COMPENSATION MITIGATION REQUIREMENTS Version 2**  
**IVANPAH SOLAR ELECTRIC GENERATING SYSTEM (07-AFC-05)**  
 December 30, 2008

Proposed Mitigation	Nexus to Desert Tortoise (DT) Impacts	Nexus to other Biological Resource Impacts
<b>Land Acquisitions</b>		
<p><u>CEC/DFG:</u></p> <ol style="list-style-type: none"> <li>1) Acquire private parcels as listed below for BLM</li> <li>2) Acquire private parcels containing desert tortoise habitat in other priority areas of the Mojave Desert                             <ol style="list-style-type: none"> <li>A. Ivanpah, Shadow and/or Piute Valley areas</li> <li>B. West Mojave Desert area</li> </ol> </li> </ol> <p><u>BLM:</u></p> <ol style="list-style-type: none"> <li>1) Acquire private parcels containing desert tortoise habitat in the Ivanpah Valley or Shadow Valley portions of the BLM DWMA</li> <li>2) Acquire private in-holdings in critical habitat portions of the Mojave National Preserve</li> <li>3) Acquire private parcels containing desert tortoise habitat in the Piute Valley portion of the BLM's DWMA.</li> </ol>	<p>Direct compensation for loss of existing DT population and an estimated 4,065 acres of DT habitat will require an estimated acquisition of 8,130 acres of suitable land. In addition, implementation of a combination of "Enhancement Actions" listed below is required, the combination of activities is subject to agency approval approval of the agencies. This compensation does not include avoidance and minimization measures, or the costs associated with those requirements.</p>	<p>Additional compensation may be required for impacts to rare plants, waters of the state, and cumulative project impacts. Some direct compensation may occur for those species of concern listed in the PSA's "Biological Resources Table 4: Summary of Impact/Mitigation" depending on the specific location and habitat type of those comp. lands acquired for DT.</p>

## DRAFT Desert Tortoise (DT) ALTERNATIVE MITIGATION OPTIONS

Proposed Mitigation	Nexus to Desert Tortoise (DT) Impacts	Nexus to other Biological Resource Impacts
<b>Enhancement Actions</b>		
<p><u>Fencing:</u></p> <ul style="list-style-type: none"> <li>• I-15 from Nipton Road to Ivanpah Dry Lake</li> <li>• U.S. Highway 95 through Piute Valley from the CA/NV line to Goffs Road</li> <li>• Nipton Road between CA/NV border and I-15</li> <li>• Fence boundary for the community of Nipton</li> <li>• Fence boundary for the community of Goffs</li> </ul>	<p>Decrease in DT mortality. Need to evaluate potential increase to adult/juvenile survivorship. Additional fencing to be evaluated as potential improvement to habitat up to ½ mile from road. Some fencing will be required as minimization for project impacts as part of DT Translocation Plan.</p>	<p>Potential decrease in mortality of small mammals and reptiles and adjacent off-highway vehicle destruction to habitat and plants. Additional analysis needed.</p>
<p><u>Habitat Restoration:</u></p> <ul style="list-style-type: none"> <li>▪ Provide funding for restoration, including vertical mulching, of closed routes in Shadow Valley, Piute Valley, and Ivanpah Valley; or other important habitat areas for DT</li> <li>▪ Exotic plant removal (e.g. tamarisk from washes/springs)</li> <li>▪ Identify and clean up destroyed or damaged habitat areas, which may include illegal dumpsites, illegal routes, etc., in Shadow Valley, Piute Valley, and Ivanpah Valley. critical habitat portions of the Mojave National Preserve, or other important habitat areas for DT</li> </ul>	<p>Decrease in DT mortality associated with use of closed or illegal routes; increase in habitat quality for DT; potential increase to adult/juvenile survivorship based on improvement in forage species with natural reseeding and removal of exotics. Additional evaluation needed.</p>	<p>Potential decrease in mortality of small mammals and reptiles and adjacent off-highway vehicle destruction to habitat and plants; potential increase in biodiversity of habitat. Additional analysis needed.</p>
<p><u>Retire Grazing Allotments/Removal of Burros:</u> Purchase assoc. private lands or specific grazing allotments and retire them in-perpetuity</p> <p>Removal of burros from the Clark Mountain and Dead Mountain Herd Management Areas to be included in this analysis.</p>	<p>Increase in habitat quality for DT; potential increase to adult/juvenile survivorship based on improvement in forage species with natural reseeding and minimization of spread of exotics. Additional evaluation needed.</p>	<p>Increase in habitat quality; potential increase in biodiversity of habitat and plant species with natural reseeding and minimization of spread of exotics. Additional evaluation needed.</p>



**BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT  
COMMISSION OF THE STATE OF CALIFORNIA  
1516 NINTH STREET, SACRAMENTO, CA 95814  
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APPLICATION FOR CERTIFICATION  
FOR THE *IVANPAH SOLAR ELECTRIC  
GENERATING SYSTEM*

DOCKET No. 07-AFC-5  
PROOF OF SERVICE  
(Revised 11/23/09)

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DECLARATION OF SERVICE

I Maria Santoudjian, declare that on January 12, 2010, I served and filed copies of the attached, Exhibit 310. The original document, filed with the Docket Unit, is accompanied by a copy of the most recent Proof of Service list, located on the web page for this project at: [\[www.energy.ca.gov/sitingcases/ivanpah\]](http://www.energy.ca.gov/sitingcases/ivanpah).

The documents have been sent to both the other parties in this proceeding (as shown on the Proof of Service list) and to the Commission's Docket Unit, in the following manner:

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I declare under penalty of perjury that the foregoing is true and correct.

Original Signature in Dockets  
**Maria Santoudjian**