STATE OF CALIFORNIA

Energy Resources Conservation and Development Commission

In the Matter of:

APPLICATION FOR CERTIFICATION FOR THE IVANPAH SOLAR ELECTRIC GENERATING SYSTEM DOCKET NO. 07-AFC-5

DOCKET

07-AFC-5

DATE MAR 16 2010

RECD. MAR 16 2010

INTERVENOR WESTERN WATERSHEDS PROJECT ADDITIONAL TESTIMONY FOR TOPICS TO BE HEARD MARCH 22, 2010, UPDATED LIST OF EXHIBITS, AND PROOF OF SERVICE

March 16, 2010

Michael J. Connor, Ph.D. California Director Western Watersheds Project PO Box 2364 Reseda, CA 91337-2364 (818) 345-0425 mjconnor@westernwatersheds.org

INTERVENOR WESTERN WATERSHEDS PROJECT

ADDITIONAL TESTIMONY FOR TOPICS TO BE HEARD MARCH 22, 2010

Intervenor Western Watersheds Project provides the following additional testimony and updated list of exhibits pursuant to the *Notice of Additional Evidentiary Hearing* issued March 11, 2010.

The attached testimony was prepared by Michael J. Connor (Connor Declaration attached). Dr. Connor will be available to testify by telephone on March 22, 2010.

UPDATED LIST OF EXHIBITS

Exhibit Number Author and Title

521 Additional Testimony of Michael J. Connor.

ATTACHMENTS: Declaration of Michael J. Connor

Additional Testimony of Michael J. Connor

Certificate of Service

Dated: March 16, 2010

Respectfully submitted,

Michael J. Connor, Ph.D.

California Director

Western Watersheds Project

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STATE OF CALIFORNIA

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In the Matter of:

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IVANPAH SOLAR ELECTRIC GENERATING SYSTEM (ISEGS) (Docket 07-AFC-5)

INTERVENOR WESTERN WATERSHEDS PROJECT Declaration of Michael J. Connor Additional Testimony Regarding Impacts to Desert Tortoise

I, Michael J. Connor, declare as follows:

knowledge and belief.

- 1) I am the California Director for Western Watersheds Project. I have worked for Western Watersheds Project since spring 2007.
- 2) My relevant professional qualifications and experience are set forth in the *curriculum vitae* and the testimony that were submitted on December 18, 2009 and are incorporated herein by reference.
- 3) I prepared the additional testimony attached hereto and incorporated herein by reference, relating to the impacts of the Project on desert tortoise.
- 4) I prepared the additional testimony attached hereto and incorporated herein by reference relating to the proposed Project in the Ivanpah Valley in San Bernardino County.
- 5) It is my professional opinion that the attached rebuttal testimony is true and accurate with respect to the issues that they address.
- 6) I am personally familiar with the facts and conclusions described within the attached testimony and if called as a witness, I could testify competently thereto.

 I declare under penalty of perjury that the foregoing is true and correct to the best of my

Dated: March 16, 2010

Signed: Why) - Land

At: Reseda California

STATE OF CALIFORNIA

Energy Resources Conservation and Development Commission

In the Matter of:

APPLICATION FOR CERTIFICATION FOR THE IVANPAH SOLAR ELECTRIC GENERATING SYSTEM DOCKET NO. 07-AFC-5

ADDITIONAL TESTIMONY OF MICHAEL J. CONNOR REGARDING IMPACTS TO DESERT TORTOISE

To the best of my knowledge, all of the facts contained in this testimony are true and correct. I am personally familiar with the facts and conclusions described within this testimony and if called as a witness, I could testify competently thereto. My qualifications and experience have been provided with my previous testimony. Through this additional testimony, I also re-adopt my previous testimony and rebuttal testimony.

STATEMENT

I have reviewed the Applicant's Biological Mitigation Proposal ("Mitigated Ivanpah 3") Ivanpah Solar Electric Generating System (07-AFC-5).

The record shows that the proposed project would have severe direct, indirect and cumulative effects on California's Northeastern Mojave desert tortoise population. This new proposal slightly reduces the project footprint but as with the prior proposal the documentation fails to address and analyze fragmentation and connectivity issues posed by the project. Nor does the new proposal provide a realistic evaluation of the cumulative effects of the project on California's Northeastern Mojave desert tortoise population raised in previous testimony.

The revised direct footprint of the Ivanpah project would still take over two percent of the entire Northeastern Mojave Recovery Unit desert tortoise habitat in California. The applicant claims that the "Mitigated Ivanpah 3" proposal "would benefit the desert tortoise by avoiding long-term impacts to 433 acres of habitat". [Mitigated Ivanpah 3 Proposal at 3-2] The applicant further suggests that avoiding these 433 acres would result in three less tortoises needing to be translocated. However, how many, if any, individual desert tortoises would benefit directly from the "Mitigated Ivanpah 3" proposal is unclear. This is because (a) actual desert tortoise abundance on the ISEGS

site has not been determined; and, (b) the current location of the three desert tortoises encountered during the protocol surveys conducted two years ago is unknown. The area occupied by the 433 acres that would be avoided under the proposal is an irregular polygon with a width of approximately 1,000 feet. Any individual tortoises present in this area would still be subject to indirect effects from the project such as changes in social structure due to loss of the local population and reduction of home ranges or activity areas.

The project proponents also suggest that the avoided 433 acres may provide a site for tortoise translocations. However, elsewhere the proposal states that the 433 acres is part of the ISEGS site that would require the most grading and rock removal, and that avoidance of this area would reduce the area requiring grading by 88 percent. [Mitigated Ivanpah 3 Proposal at 1-2] The applicant fails to analyze the availability of friable soils for burrow construction by desert tortoises within this area, which may restrict the carrying capacity of the site and thus its suitability as a translocation site for tortoises. The applicant also fails to consider the other projects proposed in the immediate vicinity of the 433 acres which would further reduce the suitability of this area for desert tortoise translocation.

The project proponents claim that preserving some vegetation on 109 acres in the Construction and Logistics Area will benefit desert tortoises because "it would likely improve the post-operational reclamation of tortoise habitat". [Mitigated Ivanpah 3 Proposal at 3-3] Although they provide no basis for doing so in the document, the applicants appear to be poised to use this as an argument to reduce compensatory mitigation. However, because the Construction and Logistics Area will not be available for use by desert tortoises it must be counted as lost to the species and must be fully compensated for.

The major indirect effects of the ISEGS project on the North Ivanpah Valley desert tortoise population such as increased fragmentation and loss of connectivity are not addressed in the document but would not be reduced by the new proposal. Habitat fragmentation is the separation or splitting apart of previously contiguous, functional habitat. The project will divide the North Ivanpah Valley desert tortoise habitat, and in doing so will fragment the existing desert tortoise population and compromise its long-term viability. Because the adjacent Mountain Pass area provides the only known connectivity between the Northeastern and the Eastern Mojave Desert Tortoise Evolutionarily Significant Units, the "Mitigated Ivanpah 3" proposal will not reduce risks to loss of connectivity posed by the ISEGS project. Loss of connectivity will increase population isolation and increase the probability of loss of genetic diversity for the species as a whole.

The habitat in the 433 acres that will be avoided under the new proposal is at the north end of the ISEGS project site. An additional solar power plant is proposed immediately to the east of this area, and the proposed DesertExpress railway line would pass to the north. Any desert tortoises in the avoided 433 acres would be isolated within this pocket of habitat. The cumulative fragmenting effects of the "Mitigated Ivanpah 3"

project and other projects would compromise the continued viability of the desert tortoise population in the North Ivanpah Valley, an area that includes about a quarter of the entire range of the Northeastern Mojave Evolutionarily Significant Unit in California.

It is my opinion that the direct, indirect, and cumulatively impacts of the proposed "Mitigated Ivanpah 3" project on the threatened desert tortoise will be severe, highly significant, and are essentially unchanged from the prior proposal. The project would eliminate a broad expanse of relatively undisturbed desert tortoise habitat. It would compromise the viability of the North Ivanpah Valley desert tortoise population. It would isolate and fragment California's Northeastern Mojave desert tortoise population. It would not reduce the cumulative effects of this and other projects to desert tortoise.



BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT COMMISSION OF THE STATE OF CALIFORNIA

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APPLICATION FOR CERTIFICATION
FOR THE IVANPAH SOLAR ELECTRIC
GENERATING SYSTEM

DOCKET NO. 07-AFC-5 PROOF OF SERVICE (Revised 3/11/10)

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California Energy Resources Conservation and Development Commission

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DECLARATION OF SERVICE

I, Michael J. Connor, declare that on March 16, 2010, I served and filed copies of the attached Additional Testimony dated March 16, 2010. 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].

The document has 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:

FOR SERVICE TO ALL OTHER PARTIES:

X_ sent electronically to all email addresses on the Proof of Service list;
X_ by personal delivery or by depositing in the United States mail at with first-class postage thereon
fully prepaid and addressed as provided on the Proof of Service list above to those addresses NOT marked "email preferred."
AND
FOR FILING WITH THE ENERGY COMMISSION:
X sending an original paper copy and one electronic copy, mailed and emailed respectively, to the address below (preferred method);
OR
depositing in the mail an original and 12 paper copies, as follows:
CALIFORNIA ENERGY COMMISSION
Attn: Docket No.
1516 Ninth Street, MS-4

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

Sacramento, CA 95814-5512 docket@energy.state.ca.us

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