

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

**IVANPAH SOLAR ELECTRIC
GENERATING SYSTEM (IS EGS)
(07-AFC-5)**

**BRIEF OF INTERVENOR WESTERN WATERSHEDS PROJECT ON THE PETITION
FOR RECONSIDERATION**

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

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RECD. <u>OCT 25 2010</u>

BRIEF OF INTERVENOR WESTERN WATERSHEDS PROJECT

Pursuant to the Commissioners (1) NOTICE OF HEARING ON PETITION FOR RECONSIDERATION OF ISEGS FINAL DECISION BY INTERVENOR BASIN AND RANGE WATCH AND ANY OTHER SUBSEQUENTLY FILED PETITION(S); (2) ORDER ON RESPONSES TO PETITION(S); AND (3) OFFICIAL NOTICE OF USFWS BIOLOGICAL OPINION dated October 12, 2010, Intervenor Western Watersheds Project provides this brief in support of the petition for reconsideration (“petition”) filed by Basin and Range Watch.

A petition for reconsideration must specifically set forth either: 1) new evidence that despite the diligence of the moving party could not have been produced during evidentiary hearings on the case; or 2) an error in fact or change or error of law. 20 CCR § 1720. Basin and Range Watch (“BRW”) requested reconsideration of the Commission’s decision on the Ivanpah Solar Electric Generating System based on both an error in fact and new information on the status of the Northeastern Mojave Evolutionary Significant Unit of desert tortoise (*Gopherus agassizii*) in Ivanpah Valley. Western Watersheds Project provides the following argument in support of BRW’s petition.

(1) The Genetic Uniqueness of the Desert Tortoises in the Ivanpah Valley Justify a Heightened Level of Concern and Protection.

Under CEQA, an agency must solicit and respond to comments from the public 15002(j). In this case, the Commissioner dismissed concerns over the significance of the “genetic” significance of the Ivanpah Valley desert tortoises.

The Errata to the Presiding Members Proposed Decision states,

Several commentators mentioned the genetic uniqueness of the desert tortoises in the Ivanpah Valley as justifying a heightened level of concern and protection. When pressed, however, no definitive evidence or rationale for doing so was presented. (8/24/10 RT, pp. 150 – 153.) At this point we consider the concern to be speculative.

Errata at 33. This conclusion was drawn in response to concerns expressed in public comment on the Presiding Members Proposed Decision.

As we review below, the cited testimony does not support the conclusion that the need for a heightened concern is speculative. In, addition, as BRW point out in the petition, there is ample information in the record and documents provided to the Commission that demonstrates the genetic uniqueness of this population of desert tortoise and also why this is important.

(a) The Conclusion is Not Justified by the Cited Testimony

The citation – (8/24/10 RT, pp. 150 – 153) – is to the transcript of the August 24, 2010 conference during which Ileene Anderson offered testimony related to translocating desert tortoises from the proposed project site to Mojave National Preserve. Her testimony included

reference to Exhibit 950: Hagerty, Bridgette E. and C. Richard Tracy (2007) Follow-up report from the Scientific Advisory Committee meeting “Genetic Structure of the Mojave Desert Tortoise.” Ms. Anderson stated, “That paper basically shows that there's some genetic differences between the proposed project site and the genetics of the tortoises on the Mojave National Preserve.” There then followed several questions and statements over the significance of this specific difference.

Ms. Anderson’s direct testimony concluded with a question from Commissioner Boyd.

COMMISSIONER BOYD: This may surprise you, but I actually read this and a lot of other stuff last night which I found was very repetitive, because each of you were submitting copies of the same thing. But I thought I read in that the author saying they had a very difficult time discerning genetic differences between a large body of desert tortoises.

MS. ANDERSON: A large body?

COMMISSIONER BOYD: Meaning, they struggle to find differences in desert tortoises in a wide area of the desert. And I don't know how -- to what extremes they had to go to get this genetic difference. I mean, I began to -- I don't remember anymore, you know, but think of all this non-mixing of gene pool stuff myself as I read this last night. I thought -- it was late and I was weary. But anyway, I came away with that. You might want to correct me.

MS. ANDERSON: Well, certainly with regards to the genetics of the different recovery units, I think that's been fairly well studied and identified in the literature. Now what scientists are honing down on is sort of what's going on within those different recovery units and how closely related are they or not. And so I think it's just important to be conservative in how we're translocating tortoises around on the landscape, because of the difference in the genetics. And even a small difference -- I mean, when you're talking about genetics of any organism, there is an extensive amount of genetic material in there. And what they're looking at is certain parts of the genetic material and looking for differences within that. And it's whether or not they're targeting the right thing and to look for those differences.

In her testimony, Ms. Anderson simply reiterated that variation within a recovery unit tends to less than between recovery units, but those smaller genetic differences may still be important. She neither testified, nor answered questions, nor was asked questions about the significance of the genetic uniqueness of the Ivanpah Valley desert tortoises during that testimony.

The Commissioners ignored subsequent direct testimony offered by Dr. Connor on the topic during that same hearing.¹ (8/24/10 RT, pp. 174 – 175.)

¹ See also, EXHIBIT 521 Additional Testimony of Michael J. Connor Regarding Desert Tortoise Relocation, dated August 20, 2010. Sponsored by Intervenor Western Watersheds Project, and admitted into evidence on 8/24/2010.

...And then the fifth item was this concept of genetic pollution. One of the things that we know is that there are often tortoises in the Ivanpah Valley close to the interstate that apparently are not the local sub-unit type. This is identified by Dr. Hagerty in his [her] Ph.D. Thesis. A summary of that thesis is the paper that I believe the Commissioner read last night, the Tracy and Hagerty summary. Dr. Hagerty found that there's strong isolation by distance, just like the Murphy paper² that we heard about back in January. That is the further apart you are with the part of the habitat, the more dissimilar the genetic makeup of the tortoises.

And generally speaking, when you're looking at a small area, you're not going to find significant differences between the tortoises in an area unless there is a barrier. So tortoises on one side of the mountain and the other side of the mountain may show genetic difference. But generally speaking of [in] a long valley, they should be very similar.

In summary, neither the citation (8/24/10 RT, pp. 150 – 153.) nor subsequent testimony on desert tortoise provided that day support the Presiding Member's conclusion that public concern over the genetic uniqueness of the Ivanpah Valley desert tortoises is speculative.

(b) The Conclusion Ignores the Extensive Record on the Subject

The issue of the “genetic uniqueness” of the Ivanpah desert tortoises and the importance of this were addressed extensively in oral testimony, written testimony, and associated exhibits. Dr. Marlow and Dr. Connor gave oral testimony on the topic at the January 2010 hearings. In addition to the listed exhibits, a number of agency documents that were taken official notice of during the proceeding also attest to the importance of the Ivanpah desert tortoise population including the 1994 Desert Tortoise (Mojave Population) Recovery Plan which described and characterized the six recognized desert tortoise evolutionarily significant units and the recovery units in which they are found. We have provided a Table at the end of this brief that lists specific documents, scientific papers and reports entered into evidence that are relevant to this issue.

Western Watersheds Project in its April 1, 2010 *Brief*, posed questions relevant to the significance of the Ivanpah Valley desert tortoises and answered them based on the project record and hearing testimony. Two of these questions are directly relevant to the issue at hand - Question 1. Why is this desert tortoise population so important? Question 2. How and why does the project negatively impact this population? We have extracted the material below directly from Western Watersheds Project’s April 1, 2010 *Brief*.

Question 1. Why is this desert tortoise population so important?

The project record and hearing testimony have established the following:

² EXHIBIT 507 Murphy, R. W., Berry, K. H., Edwards, T. and McLuckie, A. M. 2007. Genetic Assessment of the Recovery Units for the Mojave Population of the Desert Tortoise, *Gopherus agassizii*. *Chelonian Conservation and Biology* 6(2): 229-251. Sponsored by Intervenor Western Watersheds Project, and admitted into evidence on 1/14/2010.

- (a) In 1989 the desert tortoise was listed under the California Endangered Species Act and given an emergency listing under the federal Endangered Species Act.
- (b) In 1994 the *Desert Tortoise (Mojave Population) Recovery Plan* (“Recovery Plan”, USFWS 1994³) was published. The recognized Recovery Plan identified six Evolutionarily Significant Units (ESU) or evolutionarily distinct populations of desert tortoise within the listed Mojave desert tortoise population. An ESU is a population, or group of populations, that represents significant adaptive variation within the species (USFWS 1994 at 19). The six desert tortoise ESUs were identified on the basis of genetic, morphological, behavioral, and ecological data. Subsequent detailed genetic analysis has shown that the Mojave population shows an “isolation by distance” pattern (i.e. the further apart sampled tortoises are the greater the genetic differentiation) and provides independent support for the original ESU designations (Murphy et al, 2007, Exhibit 507). The Recovery Plan recognized six “Recovery Units” defined as geographic areas that harbor these Evolutionarily Significant Units of desert tortoise.
- (c) The proposed ISEGS site lies within the Northeastern Mojave Desert Tortoise Recovery Unit. This recovery unit extends from the Ivanpah Valley in California through Nevada and into extreme southwestern Utah and northwestern Arizona (USFWS 1994 Figure 9, Exhibit 503). However, the tortoises in the Northeastern Mojave Recovery Unit show some degree of genetic heterogeneity (Lamb et al., 1989, Exhibit 506; USFWS 1994; USFWS 2008) consistent with natural barriers and may consist of at least three distinct populations (Britten et al, 1997, Exhibit 510). The Recovery Unit is already heavily fragmented by human development including the Greater Las Vegas conurbation. Interstate 15 has already fragmented the Ivanpah Valley (01-11-10 Transcript at 252). The power plant will inevitably exacerbate that fragmentation, increasing the threat to the genetically distinct tortoises in the Ivanpah Valley.
- (d) In California, the Northeastern Mojave desert tortoises are restricted to the Ivanpah Valley with the boundaries marked by the Clark, Ivanpah, and New York Mountains, an area that amounts to less than 184,519.6 acres. (CNDDDB 2009, Exhibits 508 and 509) The North Ivanpah Valley accounts for a quarter of the habitat for Northeastern Mojave desert tortoises in California. (Exhibit 517 at 7)
- (e) Tortoises in the Ivanpah Valley differ genetically from other desert tortoise populations in California (Lamb, 1986, Exhibit 505; Lamb et al., 1989, Exhibit 506; Murphy et al., 2007, Exhibit 507). In fact, these Ivanpah Valley desert tortoises exhibit the greatest genetic differentiation of the five recognized units occurring in California (Murphy et al., 2007, Exhibit 507). According to the FSA/DEIS, the desert tortoise population in the North Ivanpah Valley is also unique because it is the highest elevation at which this species is known to reside in the state (PSA/DEIS at 6.2-29).

³ Documents not given an Exhibit number are on the list of documents officially noticed for these proceedings.

(f) The 1994 Recovery Plan proposed establishing Desert Wildlife Management Areas (“DWMA”) within each desert tortoise Recovery Unit. Reserve level management would be implemented within these DWMA to recover the populations. The Recovery Plan included the North Ivanpah Valley in its proposed Ivanpah DWMA (see USFWS 1994 Figure 9, Exhibit 503).

(g) According to the *Draft Revised Desert Tortoise Recovery Plan* (USFWS 2008 at 46), the Mountain Pass area in California provides the connectivity between the Northeastern Mojave and Eastern Mojave desert tortoise ESUs. This area is located at the southern end of the North Ivanpah Valley. This connectivity is the route for gene flow between the California and out-of-state populations. Gene flow is critical to maintaining the genetic diversity that will insure survival of the desert tortoise.

(h) The limited range, overall importance to genetic diversity, and their behavioral adaptations underlie the need to conserve this desert tortoise population in California. This is especially important given the threats posed by global climate change. As the USFWS 2008 Draft Revised Recovery Plan notes, “Climatic regimes are believed to influence the distribution of plants and animals through species-specific physiological thresholds of temperature and precipitation tolerance. Warming temperatures and altered precipitation patterns may result in distributions shifting northward and/or to higher elevations, depending on resource availability (Walther et al. 2002). We may expect this response in the desert tortoise to reduce the viability of lands currently identified as “refuges” or critical habitat for the species.” (USFWS 2008 at 133; Exhibit 517 at 7)

(i) In 1988, the BLM categorized the North Ivanpah Valley as Category I desert tortoise habitat under its range wide plan for desert tortoise habitat management (Spang et al, 1988, Exhibit 512). The BLM’s NEMO Plan focused desert tortoise recovery in California on the Eastern Mojave Recovery Unit to the detriment of the Northeastern Mojave Recovery Unit. “Strategies for the Northern and Eastern Mojave Recovery Unit are focused firstly in areas northeast of Las Vegas, and secondarily, in an area north of Nipton Road in an area of Nevada that is not adjacent to the state line.” NEMO Plan at 1-3. Consequently, the BLM elected not to include the North Ivanpah Valley in the Ivanpah DWMA. Thus, the NEMO Plan’s analysis did not specifically address conservation of the Northeastern Mojave desert tortoises nor did it address California State interests in these tortoises. As a practical matter, the tortoise population in the North Ivanpah Valley was ignored, with obvious consequences.

(j) Under the NEMO Plan, all desert tortoise habitat outside DWMA was reclassified as Category III. The designation Category III simply means the habitat is not currently within a designated DWMA and it remains good quality desert tortoise habitat. The BLM manages all categorized desert tortoise habitat to protect desert tortoise with the management goal for Category III habitat being to limit tortoise habitat and population declines.

(k) Recent population estimates are not available for desert tortoises in the Ivanpah Valley. However, the Ivanpah Valley population has experienced a significant decline.

(01-11-10 Transcript at 417) The most recent range wide monitoring survey report shows that tortoise densities on conservation areas within the Northeastern Mojave Recovery Unit are the lowest of the six recognized Recovery Units, with an estimated density of 1.7 tortoises/square km, i.e. 4.4 tortoises/square mile, based on 2007 surveys (USFWS 2009, Exhibit 504). The FSA/DEIS and supporting documents are unclear as to how many tortoises will be directly affected by the proposed power plant and cites only the numbers of animals seen in surveys. Based on applicant's data in Supplemental Data Response, Set 2J at 16 (Exhibit 47), as corrected by applicants witnesses during cross examination, Dr. Connor estimated numbers of adult desert tortoises as 2.9 tortoises/sq km (7.5 per square mile) on Ivanpah 1; 1.74 tortoises/sq km (4.5 per square mile) on Ivanpah 2; and, 2.6 tortoises/sq km (7.7 per square mile) on Ivanpah 3. (01-11-10 Transcript at 434) These estimates are about twice the number of adult tortoises encountered during the project surveys.

(l) The FSA/DEIS failed to provide crucial baseline information such as the amount of desert tortoise habitat in the Northeastern Mojave Recovery Unit in California. (01-11-10 Transcript at 333). Without that information, and without accurate information about the tortoise population, the Commission cannot possibly make a rational decision about the impact of the power plant on the desert tortoise, a species endangered for the last two decades.

(m) The project will require the relocation or translocation of large number of tortoises to minimize and avoid take of the species.

Question 2. How and why does the project negatively impact this population?

(a) The North Ivanpah Valley accounts for a quarter of the habitat of the Northeastern Mojave desert tortoise ESU in California. The project footprint will consume 4-5% of the actual Northeastern Mojave ESU desert tortoise habitat in California. (Exhibit 517 at 7). Given the relative percentages, it is inconceivable that the project would not have an enormous negative effect on the tortoise population.

(b) The proposed ISEGS site bisects the North Ivanpah Valley at an angle to the Interstate 15 corridor. It will directly fragment the existing breeding population of desert tortoises, and further fragment their habitat, resulting in two smaller habitat fragments with more isolated populations. Fragmentation decreases viability and results in isolated "pockets" of desert tortoises. Fragmented populations experience increased "edge" effects (USFWS 1994 at C8) have a lower probability of persistence in the face of stochastic events such as drought (USFWS 1994 at C8). Fragmentation is particularly problematic when population densities are low, since the loss of connectiveness eliminates the possibility of recolonization. (01-11-10 Transcript at 420) The FSA/DEIS mentions fragmentation of habitat but does not quantify the degree of fragmentation or the size of the resultant habitat fragments, nor does it analyze the effects on the viability of the desert tortoise population.

(c) The proposed project as originally configured would modify 198 acres of wash habitat (FSA/DEIS at 6.2-130). Desert washes, drainage systems, and washlets are very important habitats for plants and animals in arid lands. Desert tortoises, for example, spend disproportionately much more time in wash habitat than they do in “flat” areas using them as convenient to move around their habitat, to obtain food plants found there, and for cover sites (Jennings 1997; Exhibit 515). This requires completion and full implementation of a Streambed Alteration Agreement under Fish and Game Code § 1600 et seq.

(d) The estimated number of tortoises on the project site is approximately 50 adults with an unknown number of young. This does not include the unknown number of resident tortoises at the proposed translocation site that may be affected by the translocation nor tortoises that may be impacted by the increased use of roads in the area.

(e) Indirect effects from the project include increased traffic to and from the proposed ISEGS plant, increased “edge” effects, dirt road improvements, risks of increased spread of invasive weeds, and increases in numbers of predatory ravens.

(f) Connectivity between desert tortoise populations is essential to maintain gene flow. (01-14-10 Transcript at 335). The FSA/DEIS mentioned connectivity but provided no discussion or analysis. The FSA/DEIS at 6.2-57 stated that connectivity “will be discussed in more detail below”. Connectivity was then included in the list at FSA/DEIS 6.2-72 but no further detail, discussion or analysis was provided. Because the proposed project will impact tortoises in the area identified as providing important connectivity and gene flow between the Northeastern and Eastern Mojave recovery units, disruption of this connectivity poses a threat to the genetic diversity of the Mojave population as a whole.

(g) A number of existing and proposed large-scale developments threaten the Ivanpah Valley desert tortoise population including the Next Light Silver State Solar project on the Nevada side of the border, and the DesertXpress railway, and the OptiSolar project in the North Ivanpah Valley. The cumulative effects of this project combined with these and other projects threatens the entire North Ivanpah Valley desert tortoise population which would eliminate a quarter of the range of the Northeastern Mojave desert tortoise ESU in California. This would severely compromise the long-term survival prospects of the Northeastern Mojave desert tortoises in the State. The loss of the North Ivanpah Valley desert tortoise population may sever connectivity and end gene flow between the Northeastern Mojave ESU and other Recovery Units. Since the Northeastern Mojave population is the most genetically distinct desert tortoise population in California, protection of these tortoises is critical to the survival of the four other Recovery Units found in California. The cumulative impacts of this and other projects threaten to endanger California’s Northeastern Mojave desert tortoise population, and this places the entire desert tortoise population in California at risk.

In summary, the record shows that (a) the Ivanpah Valley contains California’s only population of Northeastern Mojave desert tortoises, (b) this is the most genetically distinct desert tortoise population in California; and, (c) loss of this population threatens the entire California population

since genetic heterogeneity would be greatly diminished and connectivity with desert tortoise populations outside the state would be lost.

(2) The Mitigations Will Not Offset the Loss of A Genetically Significant Desert Tortoise Population.

BRW also object to the statement that “the enhanced habitat compensation lands that will be created will allow other tortoises and their offspring to thrive, resulting in no net loss in the tortoise population due to this project. (p. 30)” They pointed out that there is no evidence to support the assertion that “the enhanced habitat compensation lands that will be created will allow other tortoises and their offspring to thrive”. Clearly without this evidence there can be no balancing of impacts, and the fully mitigated standard cannot be reached.

There are no specific mitigations proposed to overcome the loss of so much important habitat within the Northeastern Mojave Recovery Unit in California. The few measures that are specified are vague. For example, Condition of Certification BIO-17 states, “BLM’s compensatory mitigation plan, serving as one third of the 3:1 mitigation ratio required to satisfy CESA, consists of desert tortoise habitat enhancement including installation of at least 50 miles of desert tortoise exclusion fencing on roadways in the Northeastern Mojave Recovery Unit, and habitat restoration of at least 50 routes within the Desert Wildlife Management Area.” Both enhancement actions are unclear as to intent and to efficacy. The BIO-17 should be clarified to state that installation of 50 miles of desert tortoise exclusion fencing means fencing both sides of the road with the construction of underpasses so that the fences do not eliminate tortoise movement across the road. The documents have provided no data showing that installation of desert tortoise exclusion fencing allows desert tortoise to thrive – it simply restricts their access to the fenced roads and thus reduces mortality from vehicle collisions. Likewise the statement habitat restoration of at least 50 routes is vague since it fails to specify how many miles of route will be restored, fails to define restoration, and fails to explain the value of this restoration to desert tortoise. Desert tortoises use routes whether they are “restored” or not. Route restoration *per se* offers little value to desert tortoises other than potentially reducing mortality from vehicle collisions caused by unauthorized vehicle use. There is no evidence that these so-called enhancements will compensate for any loss of habitat. The statement, “the enhanced habitat compensation lands that will be created will allow other tortoises and their offspring to thrive, resulting in no net loss in the tortoise population due to this project. (p. 30)” is speculation not fact.

Conclusion

Because approval of the Ivanpah Solar Electric Generating System project application was based on factual errors and a failure to address public comment, the Commissioners should grant BRW’s petition requesting reconsideration of the decision.

Dated: October 25, 2010

Respectfully submitted,

A handwritten signature in black ink that reads "Michael J. Connor". A thin horizontal line is drawn through the signature.

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

RELEVANT EXHIBITS	
EXHIBIT 502	Berry, K. H., Morafka, D. J. and Murphy, R. W. 2002. Defining the desert tortoise(s): our first priority for a coherent conservation strategy. <i>Chelonian Conservation and Biology</i> 4: 249-262; dated 2002. Sponsored by Intervenor Western Watersheds Project, and admitted into evidence on 1/14/2010.
EXHIBIT 504	U.S. Fish and Wildlife Service. 2009. Range-wide Monitoring of the Mojave Population of the Desert Tortoise: 2007 Annual Report. Report by the Desert Tortoise Recovery Office, U.S. Fish and Wildlife Service, Reno, Nevada; dated October 2009. Sponsored by Intervenor Western Watersheds Project, and admitted into evidence on 1/14/2010.
EXHIBIT 505	Lamb, T. 1986. Genetic variation in mitochondrial DNA of the Desert Tortoise, <i>Gopherus agassizii</i> , in California. <i>Proc. Desert Tortoise Council Symp.</i> 1986: 45-52; dated copyright 1990 (undated). Sponsored by Intervenor Western Watersheds Project, and admitted into evidence on 1/14/2010.
EXHIBIT 506	Lamb, T., Avise, J. C. and Gibbons, J. W. 1989. Phylogeographic patterns in mitochondrial DNA of the desert tortoise (<i>Xerobates agassizii</i>), and evolutionary relationships among the North American gopher tortoises. <i>Evolution</i> . 43(1): 76-87; dated 1989. Sponsored by Intervenor Western Watersheds Project, and admitted into evidence on 1/14/2010.
EXHIBIT 507	Murphy, R. W., Berry, K. H., Edwards, T. and Mccluckie, A. M. 2007. Genetic Assessment of the Recovery Units for the Mojave Population of the Desert Tortoise, <i>Gopherus agassizii</i> . <i>Chelonian Conservation and Biology</i> 6(2): 229- 251; dated 2007. Sponsored by Intervenor Western Watersheds Project, and admitted into evidence on 1/14/2010.
EXHIBIT 510	Britten, H. B., Riddle, B. R., Brossard, P. F., Marlow, R. and Lee, Jr., T. E. 1997. Genetic delineation of management units for the desert tortoise, <i>Gopherus agassizii</i> , in the northeastern Mojave Desert. <i>Copeia</i> 1997: 523-530; dated 1997. Sponsored by Intervenor Western Watersheds Project, and admitted into evidence on 1/14/2010.
EXHIBIT 514	Letter submitted December 18, 2009 by the Desert Tortoise Council to John Kessler, Project Manager, California Energy Commission, Re: Ivanpah Solar Electric Generating System (07-AFC-5). 4 pp.; dated 12/18/2009 Sponsored by Intervenor Western Watersheds Project, and admitted into evidence on 1/14/2010.
EXHIBIT 516	Rebuttal Testimony Of Intervenor Western Watersheds Project; dated January 5, 2010, docketed January 5, 2010. Sponsored by Intervenor Western Watersheds Project, and admitted

	into evidence on 1/14/2010.
EXHIBIT 517	Intervenor Western Watersheds Project Opening Testimony for Topics to be Heard in January 2010, Exhibit List, and Proof of Service, dated December 18, 2009. Sponsored by Intervenor Western Watersheds Project, and admitted into evidence on 1/14/2010.
EXHIBIT 519	Additional Testimony of Michael J. Connor Regarding Impacts to Desert Tortoise, dated March 16, 2010. Sponsored by Intervenor Western Watersheds Project, and admitted into evidence on 3/22/2010.
EXHIBIT 521	Additional Testimony of Michael J. Connor Regarding Desert Tortoise Relocation, dated August 20, 2010. Sponsored by Intervenor Western Watersheds Project, and admitted into evidence on 8/24/2010.
EXHIBIT 522	Letter from Michael Connor to George Meckfessel, BLM dated February 11, 2010. Duplicate of a portion of Exhibit 523, below, not admitted into evidence.
EXHIBIT 523	Letter from Michael Connor to George Meckfessel, BLM dated May 31, 2010. Sponsored by Intervenor Western Watersheds Project, and admitted into evidence on 8/24/2010.
EXHIBIT 607	Boarman WI. 2002. Threats to Desert Tortoise Populations: A Critical Review of the Literature. U.S. Geological Survey, Western Ecological Research Center. Sacramento CA: August 9, 2002. Sponsored by Intervenor Sierra Club, and admitted into evidence on 1/14/2010.
EXHIBIT 709	DFG Comments on the Preliminary Staff Assessment and Recommendations for the Final Staff Assessment for the Ivanpah Solar Electric Generating System; dated 10/27/2009, docketed 10/28/09. Sponsored by Intervenor Defenders of Wildlife, and admitted into evidence on 1/14/2010.
EXHIBIT 713	Intervenor Defenders of Wildlife Rebuttal Testimony; dated January 4, 2010, docketed January 4, 2010. Sponsored by Intervenor Defenders of Wildlife, and admitted into evidence on 1/14/2010.
EXHIBIT 950	Hagerty, Bridgette E. and C. Richard Tracy (2007) Follow-up Report From The Scientific Advisory Committee Meeting "Genetic Structure Of the Mojave Desert Tortoise." Sponsored by Intervenor Center for Biological Diversity, and admitted into evidence on 8/24/2010.

**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

DECLARATION OF SERVICE

I, Michael J. Connor, declare that on October 25, 2010, I served and filed copies of the attached Brief dated October 25, 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:

sent electronically to all email addresses on the Proof of Service list;
 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:

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. 07-AFC-5
1516 Ninth Street, MS-4
Sacramento, CA 95814-5512
docket@energy.state.ca.us

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

Michael J. Connor



**BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT
COMMISSION OF THE STATE OF CALIFORNIA
1516 NINTH STREET, SACRAMENTO, CA 95814
1-800-822-6228 – WWW.ENERGY.CA.GOV**

APPLICATION FOR CERTIFICATION
FOR THE *IVANPAH SOLAR ELECTRIC
GENERATING SYSTEM*

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

APPLICANT

Solar Partners, LLC
John Woolard,
Chief Executive Officer
1999 Harrison Street, Suite #500
Oakland, CA 94612

Todd A. Stewart, Project Manager
Ivanpah SEGS
sdeyoung@brightsourceenergy.com
E-mail Preferred

Steve De Young, Project Manager
Ivanpah SEGS.
1999 Harrison Street, Ste. 2150
Oakland, CA 94612
tstewart@brightsourceenergy.com

APPLICANT'S CONSULTANTS

John L. Carrier, J. D.
2485 Natomas Park Dr. #600
Sacramento, CA 95833-2937
jcarrier@ch2m.com

COUNSEL FOR APPLICANT

Jeffery D. Harris
Ellison, Schneider
& Harris L.L.P.
2600 Capitol Avenue, Ste. 400
Sacramento, CA 95816-5905
jdh@eslawfirm.com

INTERESTED AGENCIES

California ISO
e-recipient@caiso.com

Tom Hurshman,
Project Manager
Bureau of Land Management
2465 South Townsend Ave.
Montrose, CO 81401
tom_hurshman@blm.gov

Raymond C. Lee, Field Manager
Bureau of Land Management
1303 South U.S. Highway 95
Needles, CA 92363
Raymond_Lee@ca.blm.gov

Becky Jones
California Department of
Fish & Game
36431 41st Street East
Palmdale, CA 93552
dfqpalm@adelphia.net

INTERVENORS

California Unions for Reliable Energy ("CURE")
c/o: Tanya A. Gulesserian
Marc D. Joseph
Adams Broadwell Joseph & Cardozo
601 Gateway Boulevard, Ste 1000
South San Francisco, CA 94080
tgulesserian@adamsbroadwell.com

Western Watersheds Project
Michael J. Connor, Ph.D.
P.O. Box 2364
Reseda, CA 91337-2364
mjconnor@westernwatersheds.org

Gloria Smith, Joanne Spalding
Sidney Silliman, Devorah Ancel
Sierra Club
85 Second Street, 2nd Fl.
San Francisco, CA 94105
E-mail Service Preferred
gloria.smith@sierraclub.org
joanne.spalding@sierraclub.org
gssilliman@csupomona.edu
devorah.ancel@sierraclub.org

INTERVENORS CONT.

Joshua Basofin, CA Rep.

Defenders of Wildlife

1303 J Street, Ste. 270

Sacramento, CA 95814

E-mail Service Preferred

jbasofin@defenders.org

Basin and Range Watch

Laura Cunningham

Kevin Emmerich

P.O. Box 70

Beatty, NV 89003

atomictoadranch@netzero.net

Center for Biological Diversity

Lisa T. Belenky, Sr. Attorney

Ileene Anderson, Public Lands Desert Director

351 California Street, Ste. 600

San Francisco, CA 94104

E-mail Service Preferred

lbelenky@biologicaldiversity.org

ianderson@biologicaldiversity.org

California Native Plant Society

Greg Suba, Tara Hansen & Jim Andre

2707 K Street, Suite 1

Sacramento, California, 95816-5113

E-mail Service Preferred

gsuba@cnps.org

thansen@cnps.org

granites@telis.org

County of San Bernardino

Bart W. Brizzee, Deputy Co. Counsel

385 N. Arrowhead Avenue, 4th Fl.

San Bernardino, California, 92415

bbrizzee@cc.sbcounty.gov

ENERGY COMMISSION

JEFFREY D. BYRON

Commissioner and Presiding Member

jbyron@energy.state.ca.us

JAMES D. BOYD

Vice Chairman and

Associate Member

jboyd@energy.state.ca.us

Paul Kramer

Hearing Officer

pkramer@energy.state.ca.us

John Kessler

Project Manager

jkessler@energy.state.ca.us

Dick Ratliff

Staff Counsel

dratliff@energy.state.ca.us

Jennifer Jennings

Public Adviser

publicadviser@energy.state.ca.us