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 (ISEGS) (07-AFC-5)

BRIEF OF INTERVENOR WESTERN WATERSHEDS PROJECT

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

April 1, 2010

BRIEF OF INTERVENOR WESTERN WATERSHEDS PROJECT

Pursuant to the *Notice Of Additional Evidentiary Hearing, Revised Briefing Schedule, And Ruling On Environmental Intervenors' Motion To Compel Prehearing Conference, Set Briefing Schedule And Clarify Other Procedural Matters* issued March 11, 2010 and the email of Paul Kramer *Updated Briefing Schedule and Exhibit List* dated March 25, 21010, Intervenor Western Watersheds Project provides this brief on the Application for Certification for the Ivanpah Solar Electric Generating System Project.

The Commission is considering licensing the proposed Ivanpah Solar Electricity Generating System ("ISEGS") power plant. Under California law, the Commission is responsible for reviewing the application for certification filed for this project, and also has the role of lead agency for the environmental review of the project under the California Environmental Quality Act (CEQA). (Pub. Resources Code, § 25500 et seq.; Pub. Resources Code, § 21000 et seq.) The Commission is "responsible for considering the effects, both individual and collective, of all activities involved in a project." (Pub Resources Code 21002.1.d)

As proposed, the entire power plant project would be located on relatively undisturbed public lands that provide high quality habitat for the threatened desert tortoise and other sensitive wildlife species, and that provide important habitat for rare plant species and communities. These lands provide visual resources enjoyed by hundreds of thousands of Americans as they travel through or visit the area. The siting location was selected without the benefit of guidance from ongoing regional renewable energy planning efforts such as the BLM's Programmatic Solar Energy Development project or the state Desert Renewable Energy Conservation Plan. Because the resource values at the power plant site are so high and the environmental review for this project has been so rushed, the review suffers from critical inadequacies.

The project is subject to numerous laws, ordinances, regulations and statutes including the California Endangered Species Act, California Native Plant Protection Act, California Environmental Quality Act, the National Environmental Policy Act, the Endangered Species Act, and the Federal Land Policy Management Act. As we outline below, in violation of these laws, the environmental analysis is deficient in many facets including basic documentation of the impacts of the project, documentation of the efficacy of proposed mitigations to offset those impacts, and documenting the very feasibility of implementing the proposed mitigations. For these reasons, the Commission must deny certification for the ISEGS power plant.

A. Biological Resources

The CEQA statute specifies that state policy is to:

> Prevent the elimination of fish or wildlife species due to man's activities, insure that fish and wildlife populations do not drop below self-perpetuating levels, and preserve for future generations representations of all plant and animal communities and examples of the major periods of California history. (Pub. Resources Code 21001.c).

In considering approval of the power plant, the Commission cannot ignore the intent of CEQA. The project will push the desert tortoise further below "self-perpetuating levels," and it will insure that current "plant and animal communities" will not be "preserved[d] for future generations."

1. Desert Tortoise

The power plant will have direct, indirect, and cumulative impacts on California's Northeastern Mojave desert tortoise population. The impacts include destruction and loss of habitat, take of tortoises, habitat fragmentation, population fragmentation, loss of connectivity, and loss of viability. Because of the importance of the affected population to the species as a whole, these impacts will not be confined to the tortoises on the power plant site. They will place the entire listed desert tortoise population at risk. Below we consider three questions. Why is this desert tortoise population so important? How and why does the project negatively impact this population? And, can these impacts be mitigated?

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

The project record and hearing testimony have established the following:

(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 1994[1]) 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.

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

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. (CNDDB 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).

(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 DWMAs 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 the 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 specie 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.

(ii) 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.

(iii) Question 3. Can these impacts be mitigated?

(a) Determining the impacts of a proposed action is a requisite for defining effective mitigation measures to offset those impacts. The FSA/DEIS failed to fully identify, document, and analyze both the specific impacts and the likely success of the proposed mitigation measures at mediating those impacts. No alternative sites were considered that would avoid locating the proposed ISEGS power plant outside desert tortoise habitat. (01/14/10 Transcript at 271-272)

(b) Mitigation for all biological impacts of the project is based on a 3:1 habitat compensation ratio based on the project's footprint. This would involve acquisition of replacement habitat for conservation in perpetuity and on enhancement actions. According to staff testimony, the enhancement actions are meant to address connectivity and fragmentation impacts. (03/22/10 Transcript at 82) Although CEC Staff modified the Conditions of Certification to require that compensation habitat be acquired within the Northeastern Mojave Recovery Unit, no analysis considered the availability of this replacement habitat in California or the feasibility of this approach. The project record provides no information or analysis that supports the effectiveness of the proposed mitigation or its ability to fully mitigate for impacts to connectivity and fragmentation. Indeed, with the new configuration proposed by the applicants, the amount of funds available to mitigate impacts to connectivity will be decreased since the funding is tied to the footprint acreage although the impacts to connectivity will be the same.

(c) Other major projects are also being proposed in the North Ivanpah Valley that will lead to massive cumulative habitat loss and fragmentation, and isolation of the Northeastern Mojave ESU in California. The cumulative effects threaten to compromise the viability of the desert tortoise population of the North Ivanpah Valley, one quarter of the habitat in California, and thus the viability of the entire ESU in California. (Exhibit 517 at 10) These cumulative effects could only be conceivably mitigated if the remaining habitat in the North Ivanpah Valley was given permanent protection such as that provided by including the desert tortoise habitat within the designated Ivanpah DWMA as was proposed in the 1994 Recovery Plan and ending all other incompatible uses.

(d) Desert tortoises on the project site will be relocated or translocated to minimize take. No final translocation plan has been made available for to the public to review. The project applicants have identified four sites west of the proposed project as possible translocation sites. The northernmost of these is within the zone of influence of the proposed railway line and would not appear to be suitable for that reason alone. The tortoise densities on these proposed translocation sites are unknown since in-season surveys have not been conducted. However, if the tortoise densities are comparable to those on the project site, then translocation is likely to double the densities at the translocation sites. If the tortoise densities on the proposed translocation sites are lower than the project area, the ecological conditions underlying this need to be examined and explained. Desert tortoises depend on annual plants for their survival (USFWS 1994), but the habitat surveys conducted in the proposed relocation/translocation areas did not include surveys for annual plants. The nutritional status of wild tortoises may depend more on availability of plant species of high nutritional quality than on overall amounts of annual vegetation (Oftedahl and Allen, 1996, Exhibit 513). Without data on the quantity and quality of available forage it is unclear if the current carrying capacity of the proposed relocation sites is sufficient to support additional tortoises. This is important since the 1984 status report tortoise density map of the Ivanpah Valley (Berry et al., 1984 Plate 6-13, Exhibit 511) indicates that historic tortoise densities in the North Ivanpah Valley were not uniform and may have been lower at the translocation sites compared to the project site. Thus relocating or translocating tortoises to these sites will place an unknown number of additional desert tortoises that are resident at these sites at risk.

(e) Desert tortoises may make long-distance movements following relocation (FSA/DEIS at 6.2-50). Because of this, it is critical that barrier fencing along I-15 be in place prior to any tortoise relocations being undertaken because translocated or relocated tortoises may make long distance movements.

In summary, the direct, indirect, and cumulative impacts of the proposed project on the threatened desert tortoise will be severe and the effectiveness of the proposed mitigation is highly uncertain. The environmental documentation on which staff relied in concluding that these impacts will be less than significant is entirely inadequate and their conclusion incorrect. Since the Northeastern Mojave population is the most genetically distinct desert tortoise population in California, and the North Ivanpah Valley desert tortoises exhibit behavioral adaptations that may be important for the long-term survival of the species, protection of these tortoises and maintaining connectivity may be critical to the conservation of the entire listed population in California. California's Northeastern Mojave desert tortoise population will be placed at risk of endangerment by this project, and thus the entire desert tortoise population would be at risk.

2. Other Wildlife

The BLM's NEMO Plan set the goal for special status species as "Populations and their habitats are sufficiently distributed to prevent the need for listing" (NEMO Plan at 2-6). The FSA/DEIS fails to fully analyze impacts to bighorn sheep, provide alternatives to avoid impacts,

or provide measures to minimize these impacts. The suggested mitigation measure of adding an artificial water source in the Clark Mountain area will not mitigate for the loss of bajada foraging habitat. The FSA/DEIS also failed to identify and analyze the impacts associated with the construction and maintenance of this artificial water source such as facilitating raven presence in the North Ivanpah Valley. The FSA/DEIS failed to fully analyze impacts to gila monsters, burrowing owl, other bird species, bats, and other wildlife or to provide alternatives to avoid impacts, or provide measures to minimize impacts.

3. Rare Plants

The NEMO Plan set the goal for special status species as "Populations and their habitats are sufficiently distributed to prevent the need for listing" (NEMO Plan at 2-6). For rare plants and special status plant communities the FSA/DEIS provides too little analysis of impacts, inadequate discussion of alternatives that could avoid impacts, and inadequate information about the proposed mitigation strategy and how it will fulfill the objectives laid out in NEMO. The lack of fall surveys likely under-represents the full suite of rare plant taxa occurring on site. The FSA/DEIS concluded that the ISEGS project will result in "impacts to Mojave milkweed and Rusby's desert-mallow" that "would remain significant in a CEQA context even after implementation of the special-status plant impact avoidance and minimization measures described in Energy Commission staff's proposed conditions of certification." (FSA/DEIS p. 1-18) Under the applicant's new proposed configuration some of the impacts to Rusby's desert-mallow will be reduced but impacts to Mojave milkweed will be little changed. The best way to avoid significant impacts to rare plants occurring at this site is to relocate the project to another, lower resource value site.

B. Visual Resources

Visual resources are important public resources. Hundreds of thousands of Americans pass through the Ivanpah Valley annually. While most of these simply pass through along the major highways, many visitors do stop to visit, use and enjoy the Ivanpah Valley's public lands, Mojave National Preserve, Wilderness Areas, and recreation areas. The proposed project will significantly impact visual resources for these visitors. Staff has recommended that the Commissioners consider issuing a finding of over-riding concern. This is problematic for a number of reasons. This project is the first of many such proposed projects. Issuing a finding in this case will set a precedent for all subsequent sitings of solar power plants. The additive and cumulative effects of the proposed solar power plant and other projects will drastically change the appearance of the Ivanpah Valley from open habitat to an industrial zone. Any finding of over-riding concern would have negative repercussions for the project under the required National Environmental Policy Act review.

C. Alternatives

Because of the scale of the project it is unlikely that minor changes in the footprint would significantly reduce the direct, indirect, and cumulative effects of the project on biological or

visual resources. No alternative sites were considered that would avoid significant impacts to desert tortoise but that would allow the project to proceed. (01/14/10 Transcript at 271-272) One such location within the immediate project vicinity that would avoid desert tortoise habitat is Ivanpah Dry Lake bed. This alternative site location was raised at public meetings, was proposed by the Sierra Club in its June 22, 2009 letter, was referenced by CDFG in its October 27, 2009 letter, and should have been considered in the FSA/DEIS. While construction of the power plant at this site may require some additional engineering to accommodate flooding, the lake bed is crossed by both a freeway (I-15) and a power line so such accommodation appears feasible. Testimony presented at the hearings by Mr. Powers indicates that focus on distributed energy provides a viable alternative way to generate renewable solar energy without the need to consume public lands. (01/12/10 Transcript at 266-290)

D. Compliance with LORS

The project is subject to numerous laws, ordinances, regulations and statutes. Relevant California statutes include various sections of the Public Resources Code and the Fish and Game Code including the California Endangered Species Act ("CESA"), California Native Plant Protection Act, California Environmental Quality Act ("CEQA"), and the Warren-Alquist Act. The project must also comply with federal statutes including the National Environmental Policy Act ("NEPA"), the Endangered Species Act (ESA), and the Federal Land Policy Management Act ("FLPMA").

The intent of the legislature in enacting CESA was clearly to protect listed species and their habitats in California. State agencies are mandated to conserve listed species. (Fish and Game Code § 2055. "The Legislature further finds and declares that it is the policy of this state that all state agencies, boards, and commissions shall seek to conserve endangered species and threatened species and shall utilize their authority in furtherance of the purposes of this chapter.") This intent is also expressed in the Public Resources Code § 21001 (c) ("Prevent the elimination of fish or wildlife species due to man's activities, insure that fish and wildlife populations do not drop below self-perpetuating levels, and preserve for future generations representations of all plant and animal communities and examples of the major periods of California history.") The direct, indirect and cumulative impacts of the proposed project outlined above and in the record will place the Northeastern Mojave desert tortoise population at severe risk of endangerment in California and consequently may compromise the conservation of the species in the entire state. For this reason alone the Commissioners should deny the permit application.

The California Natural Resources Agency clearly considers that rare plants, including CNPS list 1 and 2 species, are protected under CEQA and other statutes. We refer the Commissioners to the November 24, 2009 California Natural Resources Agency, Department of Fish and Game "Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities, State of California.[2]

[2] Available on-line at:
http://www.dfg.ca.gov/biogeodata/cnddb/pdfs/Protocols_for_Surveying_and_Evaluating_Impacts.pdf

Construction of this project on public lands managed by the Bureau of Land Management requires compliance with federal law including FLPMA and NEPA. FLPMA requires that land uses conform to the governing land use plan. The governing land use plan for the project area is the CDCA Plan as amended by the 2002 NEMO Plan Amendment. The NEMO Plan's mitigation for Category III habitat applies to projects of less than 100 acres. (NEMO Plan at 2.27) The proposed project is over forty times the maximum acreage for projects covered under the NEMO Plan. The NEMO Plan did not address California State interests in the Northeastern Mojave desert tortoise population. The NEMO Plan does not even list CDFG as one of the agencies consulted (See NEMO Plan Chapter 7). Like the FSA/DEIS, the NEMO Plan failed to address impacts to California's population of Northeastern Mojave desert tortoises. BLM policy requires that any relocation of sensitive species must be in accordance with the relevant land use plan. (BLM Handbook 1745 - Introduction, Transplant, Augmentation, and Reestablishment of Fish, Wildlife, and Plants - § 1622 requires "Decisions for making introductions, transplants, or reestablishments should be made as part of the land use planning process"). A Land Use Plan Amendment must be prepared for proposed releases if management direction is not provided in the existing Land Use Plan (ibid. § 1617). The proposed project and the other projects proposed for the project area will result in large-scale relocation of desert tortoises. There is no consideration in the California Desert Conservation Area Plan as amended by the NEMO Plan of desert tortoise translocation. Therefore, a plan amendment is required to comply with BLM policy. In addition, BLM Handbook 1745 at .1.12A requires that the activity plan be site-specific and include "Site-specific and measurable vegetation/habitat population objectives which are based on existing ecological site potential/condition, habitat capability, and other important factors. (See BLM Manual Sections 1619, 6780, and 4120)." As we discussed above, the DEIS does not adequately describe existing ecological conditions nor does it address the capability of the habitat at the relocation/translocation sites to support additional tortoises.

The NEPA, 42 U.S.C. § 4321 et seq., dictates that agencies take a "hard look" at the environmental consequences of a proposed action. In order to take the "hard look" required by NEPA, agencies are required to assess impacts and effects that include: "ecological (such as the effects on natural resources and on the components, structures, and functioning of affected ecosystems), aesthetic, historic, cultural, economic, social, or health, whether direct, indirect, or cumulative." (40 C.F.R. § 1508.8) The NEPA regulations define "cumulative impact" as: the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time. (40 C.F.R. § 1508.7) Because of the identified deficiencies in the FSA/DEIS, the environmental review has not taken the requisite "hard look" at the environmental impacts.

The consideration of alternatives is a vital component of both NEPA and CEQA, and the Commission is expressly required to consider feasible alternatives which would substantially lessen the significant environmental effects of projects (Public Resources Code, § 21002). The FSA failed to consider any site alternatives that are not desert tortoise habitat such as the Ivanpah Dry Lake bed. Testimony presented at the hearings by Mr. Powers indicates that focus on distributed energy provides a viable alternative way to generate renewable solar energy without

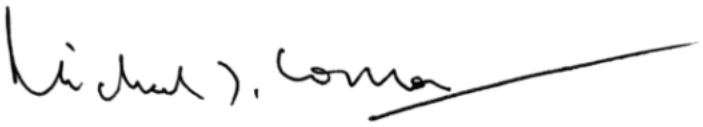
the need to consume public lands. Thus, alternatives that would substantially lessen the significant environmental effects of the project have not been given the required consideration.

E. Conclusions

The proposed project will have significant direct, indirect, and cumulative impacts on important biological and visual resources. The environmental analysis is deficient in many facets including basic documentation of the impacts of the project. The ability of the proposed mitigations to offset those impacts is unclear as is even the feasibility of implementing the mitigation. For these reasons, we urge the Commission to deny the current application for certification.

Dated: April 1, 2010

Respectfully submitted,



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

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 April 1, 2010, I served and filed copies of the attached INTERVENOR WESTERN WATERSHEDS PROJECT BRIEF dated April 1, 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

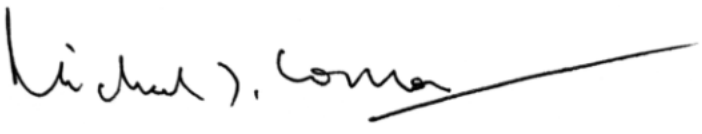
FOR FILING WITH THE ENERGY COMMISSION:

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

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



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
dfgpalm@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

*indicates change

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

*indicates change