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August 23, 2010

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DOCKET 08-AFC-13

**DATE** AUG 23 2010

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> > Re: Calico Solar; Docket No. 08-AFC-13

Dear Docket Clerk:

Please process the enclosed **OPENING BRIEF OF CALIFORNIA UNIONS FOR RELIABLE ENERGY,** conform the copy, and return the copy in the envelope provided.

Thank you.

Sincerely,

/s/

Loulena A. Miles

LAM:bh Enclosures

2309-097a

#### STATE OF CALIFORNIA California Energy Commission

In the Matter of:

The Application for Certification for the CALICO SOLAR PROJECT (formerly SES Solar One) Docket No. 08-AFC-13

# OPENING BRIEF OF CALIFORNIA UNIONS FOR RELIABLE ENERGY

August 23, 2010

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#### I. INTRODUCTION

The Commission has two legal mandates: First, the Warren-Alquist Act requires a finding that a project complies with all LORS. Second, CEQA requires, among other things, that all potential environmental impacts must be analyzed and that all significant impacts must be mitigated, including impacts from mitigation measures themselves. The Calico Solar Project ("Project"), as currently proposed, fails on both counts. The Commission's approval of the Project would violate the Warren-Alquist Act. Further, the environmental review is inadequate and cannot be relied on by the Commission in approving the Project.

CEQA requires the Commission to "use its best efforts to find out and disclose all that it reasonably can." (14 Cal. Code Regs., § 15144; see also, Vineyard Area Citizens for Responsible Growth v. City of Rancho Cordova (2002) 40 Cal.4th 412, 428.) The Commission's environmental review document must "alert the public and its responsible officials to environmental changes before they have reached ecological points of no return." (County of Inyo v. Yorty (1973) 32 Cal.App.3d 795.) The Commission's environmental review document must be prepared "with a sufficient degree of analysis to provide decision-makers with information which enables them to make a decision which intelligently takes account of environmental consequences." (CEQA Guidelines, § 15151.)

There are three reasons the Commission cannot now approve the Project. First, the Project will result in direct, indirect and cumulative impacts on a large population of state- and federally-threatened desert tortoise that currently lives in the area proposed for Project development. Approximately 107 desert tortoise would be translocated off the proposed Project site. In fact, the California Department of Fish and Game commented that this was *the largest translocation ever contemplated* by the Department, twice as large as the largest translocation effort previously undertaken. This scheme cannot be taken lightly. Commission Staff and the wildlife agencies are nowhere near completing their review of the Applicant's proposal.

Desert tortoise is listed as threatened under both the California Endangered Species Act and the federal Endangered Species Act and has been recognized as California's official state reptile since 1972. At this point, Staff's analysis of the impacts to this species is utterly incomplete and inadequate under CEQA. Additionally, Staff has not demonstrated that impacts to the animals are fully mitigated. When Staff's analysis is complete, it must be subject to public review and comment in accordance with basic CEQA requirements.

Second, the Supplemental Staff Assessment ("SSA") candidly admits that the Applicant has not provided evidence to show that its proposed water supply is sufficient and reliable. This Project is located in the Mojave Desert where the

viability of proposed development is entirely dependent upon securing a reliable water supply. The Project will require water for dust suppression, mirror washing, production of hydrogen, potable needs, fire suppression and other construction activities. However, to date, no reliable water supply has been identified.

Third, Commission Staff has not yet reviewed a number of significant environmental impacts associated with the transmission upgrades necessary for the Project. As the Commission knows, a power plant is nothing without transmission. At this time, the Project cannot deliver roughly two-thirds of its proposed power to market without the construction of a 67-mile 500kV transmission line from Pisgah to Lugo, an expansion of the Pisgah substation from 5 acres to 40 acres, and a potential new 100-acre substation in an undetermined location. However, the Applicant has not yet conducted adequate surveys, or provided other substantial evidence, to enable the Commission to make findings regarding these needed facilities.

Preliminary information regarding the location of the transmission line shows that the line would be built primarily in desert tortoise habitat. Other special-status species along the potential transmission corridor that would be impacted include the Mohave ground squirrel, short-joint beavertail cactus, white-margined beardtongue, Mojave fringe-toed lizard, western burrowing owl, golden eagle, American badger, horned lark, yellow warbler and loggerhead shrike. Many of these and other potentially significant impacts associated with the development of this transmission line have not yet been disclosed, analyzed or mitigated by Commission Staff, as required by CEQA and the Commission's regulations.

#### II. STANDARD OF REVIEW AND BURDEN OF PROOF

The Commission itself must determine whether the proposed Project complies with "other applicable local, regional, and state, . . . standards, ordinances, or laws," and whether the proposed project is consistent with Federal standards, ordinances, or laws ("LORS"). (Pub. Res. Code § 25523(d); 20 Cal. Code Regs. § 1752(a).) The Commission may not certify any project that does not comply with applicable LORS unless the Commission finds both (1) that the project "is required for public convenience and necessity" and (2) that "there are not more prudent and feasible means of achieving public convenience and necessity." (Pub. Res. Code § 25525; 20 Cal. Code Regs. § 1752(k).)

The Commission also serves as lead agency for purposes of CEQA. (Pub. Res. Code § 25519(c).) Under CEQA, the Commission may not certify the Project unless it specifically finds either (1) that changes or alterations have been incorporated into the Project that "mitigate or avoid" any significant effect on the environment, or (2) that mitigation measures or alternatives to lessen these impacts are infeasible, and specific overriding benefits of the Project outweigh its significant

environmental effects. (Pub. Res. Code § 21081; 20 Cal. Code Regs. § 1755.) These findings must be supported by substantial evidence in the record. (Pub. Res. Code § 21081.5; 14 Cal. Code Regs. §§ 15091(b), 15093; Sierra Club v. Contra Costa County (1992) 10 Cal.App.4<sup>th</sup> 1212, 1222-23.)

The Applicant "shall have the burden of presenting sufficient substantial evidence to support the findings and conclusions required for certification of the site and related facility." (20 Cal. Code Reg. § 1748(d).) Commission Staff must review the application, assess the environmental impacts and determine whether mitigation is required, and set forth this analysis in a report written to inform the public and the Commission of the Project's environmental consequences. (20 Cal. Code Reg. §§ 1744(b), 1742.5(a)-(b).) The report must be presented prior to evidentiary hearings. (20 Cal. Code Reg. §§ 1723.5(d), 1742.5(b).) Before approving a project, the Commission must conclude that Staff's report has been completed in compliance with CEQA, that the Commission has reviewed and considered the information in the report prior to approving the project, and that Staff's report reflects the Commission's independent judgment and analysis. (14 Cal. Code Regs. §15090(a); see Pub. Res. Code § 21082.1(c)(3).)

The Commission must determine whether sufficient substantial evidence is in the record to support its findings and conclusions. (Pub. Res. Code §§ 21080, 21081.5.) "Substantial evidence" is defined as:

[F]act, a reasonable assumption predicated upon fact, or expert opinion supported by fact. Substantial evidence is not argument, speculation, unsubstantiated opinion or narrative, evidence that is clearly inaccurate or erroneous...(*Id.* § 21080(e).)

California courts have made clear that "substantial evidence" is not synonymous with "any" evidence. (*Newman v. State Personnel Board* (1992) 10 Cal.App.4th 41, 47.) As defined by the courts, substantial evidence means evidence of "ponderable legal significance, reasonable in nature, credible and of solid value." (*Lucas Valley Homeowners Ass'n v. County of Marin* (1991) 233 Cal.App.3d 130, 156-7.)

This requirement also applies to expert opinions. Expert opinion does not constitute substantial evidence when it is "based on speculation and conjecture, and accordingly...not supported by substantial evidence in light of the whole record." (See, e.g., Friends of the Old Trees v. Department of Forestry and Fire Protection (1997) 52 Cal.App.4th 1383, 1399, fn. 10; Coastal Southwest Dev. Corp. v. California Coastal Zone Conservation Commission (1976) 55 Cal.App.3d 525, 532.) It does not include argument, speculation, unsubstantiated opinion or narrative, or evidence that is clearly inaccurate or erroneous. (Id.) Additionally, "opinion testimony of expert witnesses does not constitute substantial evidence when it is based upon

conclusions or assumptions not supported by evidence in the record." (Hongsathavij v. Queen of Angels/Hollywood Presbyterian Med. Ctr. (1998) 62 Cal.App.4<sup>th</sup> 1123, 1137.) These requirements ensure that members of the public and interested agencies will have an opportunity to review and comment on significant impacts and proposed mitigation and identify any shortcomings. This public and agency review has been called "the strongest assurance" of the adequacy of an environmental review document under CEQA. (Sundstrom v. Mendocino County (1988) 202 Cal.App.3d 296, 308.)

Once substantial evidence of a potential impact is presented to the lead agency, the burden shifts to the agency to investigate the potential significance of the impact. (Napa Citizens for Honest Government v. Napa County Board of Supervisors (2001) 91 Cal.App.4<sup>th</sup> 342, 385 (EIR inadequate for failing to investigate substantial evidence of Project's potential to impact protected steelhead trout).)

In this case, there is insufficient evidence to support the required findings and, therefore, the Commission cannot certify the Project without additional specific analysis and identification of mitigation.

## III. THE PROJECT WOULD RESULT IN SIGNIFICANT UNMITIGATED IMPACTS TO WILDLIFE

The Project will impact approximately 6,215 acres of public land managed by the Bureau of Land Management ("BLM"). This land provides valuable habitat and connectivity for numerous species, including desert tortoise, a species listed as threatened under the California and Federal Endangered Species Acts; Nelson's bighorn sheep, a BLM sensitive species; Mojave fringe-toed lizard, a BLM sensitive species; and burrowing owls, a BLM sensitive species and a California Species of Special Concern. Other biological resources present on the proposed Project site include American badgers, kit fox, a number of rare plants, and other sensitive natural communities and associations. The Project area also provides forage for at least one nesting golden eagle pair, a BLM sensitive and California Fully Protected species and a protected species under the federal Bald and Golden Eagle Protection Act.

In reviewing the biological resources present on the Project site, Scott Cashen testified that the area represents an extremely healthy ecosystem, one that cannot be mitigated if destroyed. (Exh. 424, p. 1.) Commission Staff concluded that the Project's effects on the wildlife within the proposed perimeter would be severe. (Exh. 300, pp. C.2-2.) Staff also found that the areas around the Project site will suffer from fragmentation due to Project development on an otherwise continuous ecosystem. (Exh. 300, p. C.2-98.) Staff cited a recent study completed in cooperation between Caltrans and the CDFG that has identified the project region as an essential connectivity area between the Bristol and Ord Mountains, an important

link between wildlife populations in the eastern and western deserts. (Id.) "As proposed, the Calico Solar Project is located within the essential connectivity area and has the potential to adversely affect wildlife movement." (Id.)

CEQA requires that a lead agency describe the physical environmental conditions in the vicinity of the project, as they exist at the time environmental review commences. (14 Cal. Code Reg. § 15125(a).) The description of the environmental setting constitutes the baseline physical conditions by which a lead agency must assess the significance of a project's impacts. (*Id.*) CEQA then requires an analysis of direct, indirect, and cumulative impacts, including an analysis of whether a project will "substantially reduce the number or restrict the range of an endangered, rare, or threatened species." (14 Cal. Code Reg. §16065(a)(1); Pub. Res. Code §§ 21083, 21065, 21065.3.)

Only after the environmental setting is established and an analysis of a project's impacts on the environment is complete may the Commission adequately assess mitigation and alternatives. CEQA prohibits agencies from approving projects "if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects of such projects." (Pub. Res. Code §§ 21002, 21081.) CEQA requires agencies to "avoid or minimize environmental damage where feasible." (14 Cal. Code Reg. § 15021(a).)

## A. THE PROJECT WILL HAVE SIGNIFICANT UNMITIGATED IMPACTS TO DESERT TORTOISE

The U.S. Fish and Wildlife Service ("USFWS") has jurisdiction to protect threatened and endangered species, including desert tortoise. Formal consultation with the USFWS under Section 7 of the ESA is required for any federal action that may adversely affect a federally-listed species. Formal consultation has been initiated by the BLM through the preparation and submittal of a Biological Assessment ("BA") which describes the proposed project to the USFWS. Following review of the BA, the USFWS must issue a Biological Opinion ("BO") for the desert tortoise, which will specify mitigation measures which must be implemented for the protection of the species under the federal Endangered Species Act. The USFWS has not issued a BO for this Project to date.

Because the desert tortoise is also listed as threatened under the California Endangered Species Act ("CESA"), impacts to desert tortoise must be fully mitigated in accordance with requirements established by the California Department of Fish and Game ("CDFG"). The proposed mitigation must meet certain criteria described in Title 14 CCR, Sections 783.4. Under these guidelines, a permit may only be issued if the applicant will minimize and fully mitigate the impacts of the take authorized under the permit. (*Id.*) All required measures must be capable of successful implementation (i.e. the measures must be legally,

technologically, economically and biologically practicable.) (*Id.*) Impacts of taking include all impacts on the species that result from any act that would cause the proposed taking. (*Id.*) The applicant must ensure adequate funding to implement the measures required under the permit to minimize and fully mitigate the impacts of the taking, and to monitor compliance with, and the effectiveness of, the measures. (*Id.*) Further, no incidental take permit shall be issued pursuant to this article if issuance of the permit would jeopardize the continued existence of the species. (*Id.*) The Department shall make this determination based on the best scientific and other information that is reasonably available, and shall include consideration of the species' capability to survive and reproduce, and any adverse impacts of the taking on those abilities in light of (1) known population trends; (2) known threats to the species; and (3) reasonably foreseeable impacts on the species from other related projects and activities. (*Id.*)

Commission Staff has not adequately analyzed all impacts associated with the desert tortoise relocation and have not shown that significant impacts to desert tortoise will be fully mitigated as is required by CESA. Moreover, the Staff have not met the public comment and response requirements of CEQA. The Commission must direct Staff to provide additional analysis that is then circulated to the public for a 30-day comment period in order to comply with the basic requirements of CEQA.

1. THE PROJECT WILL HAVE SIGNIFICANTLY GREATER IMPACTS ON THE DESERT TORTOISE POPULATION IN THE MOJAVE DESERT THAN HAS BEEN DISCLOSED BY COMMISSION STAFF IN THE SA OR SSA

The ten-mile area proposed for the Project has a sizable and healthy population of desert tortoise. (Exh. 300 p. ES-20; Exh. 424, pp. 6-7.) Significant new information has been released by Commission Staff in the *past few days* (following evidentiary hearings in this proceeding) that *dramatically changes* the estimated number of desert tortoises likely to be impacted by the Project. (Exh. 310, pp. 1-5.)

Although the Staff Assessment ("SA") issued in March 2010 estimated that the Project would require translocation of 100 desert tortoises off of the Project site, the Supplemental Staff Assessment ("SSA") issued in July 2010 stated that, due to a reduction in the Project size along the northern boundary, the Project would require translocation of 57 tortoises off site. Now, in mid-August, in a second errata to the SSA, Staff raised the estimate of the number of tortoises that would need to be translocated to 107 tortoises and concluded that the Project would result in direct mortality to 82 juvenile tortoises and destruction of 436 eggs. (Id.)

Staff's newly identified significant impacts to eggs and juvenile tortoises were not quantified or analyzed in the prior SA or SSA. The presence of juveniles and eggs demonstrates that this is a *reproducing population*. (*Id*.) The value of an intact reproducing population with juveniles and adults cannot be overstated. (Exh. 424, pp. 6-7.) Many desert tortoise populations are declining. The consequences of destabilizing one of the remaining intact reproducing desert tortoise populations is greater than the sum of the impacts to individual tortoises alone because the maintenance of healthy populations is critical to the recovery of the species. (Exh. 424, p. 7.) The destruction of a healthy population of tortoises is a direct and cumulatively significant impact that has not been analyzed or mitigated by Staff. (*Id*.)

The Applicant proposes to disease test, radio-collar and move an estimated 107 tortoises to off-site locations, some of which have not yet been identified. (Ex. 310, p. 1.) For each translocated tortoise, the Applicant proposes to handle and monitor one tortoise at a receptor site and one tortoise at a reference site, as well. There is no dispute that this process of handling *even more desert tortoise* puts these offsite populations at risk. (*Id.* p. 13.)

Staff now estimates that the Applicant's proposal to handle and monitor tortoise at a receptor site and a reference site will require the Applicant to handle, radio tag, and disease test 321 tortoises. When Staff adds the number of adults and sub adults that will either be translocated or handled or otherwise impacted (including juveniles), Staff estimates that approximately 682 tortoises will be affected. Of these Staff estimates 194 will die:

Using the estimated mortality figure of five percent for the control population (107 adult and juvenile tortoises \*0.05=5.35 rounded to 5) and an estimate of 50 percent mortality for the translocated and host populations (214 adults and juveniles \* 0.50= 107) this would result in the *potential loss of 112 tortoises from translocation mortality*. Adding the additional estimated loss of 436 eggs and 82 juveniles not detected during the clearance surveys the proposed project could result in the mortality of 194 tortoises and 436 eggs. (Exh. 310, p. 13.)

This is potentially greater than the entire population of desert tortoises expected to be present on the Project site. None of this was reported in the SA or SSA.

The magnitude of significant impacts to desert tortoises that would occur from Project development simply was not presented to the parties or to the public through this proceeding.

# 2. THE STAFF AND APPLICANT STILL HAVE NOT PROVIDED SUFFICIENT INFORMATION TO ANALYZE THE PROJECT'S SIGNIFICANT IMPACTS TO DESERT TORTOISE

With the high number of tortoises that would be subject to mortality if this Project is licensed, it would be reasonable to assume that Staff would first thoroughly vet any translocation plan proposed by the Applicant. No such vetting occurred. In fact, the desert tortoise translocation plan was not reviewed by Staff in the SA or the SSA because it was not produced by the Applicant until well after the SSA was published and well after evidentiary hearings were underway. CURE's expert, Scott Cashen, immediately reviewed the Applicant's draft translocation plan once it was made available and testified that the plan is woefully inadequate. (Exh. 443, pp. 3-5.) It would be unconscionable for the Commission to license this Project with its poorly developed draft translocation plan. It would also be illegal.

It is undisputed that the Applicant's translocation plan is incomplete. The plan fails to identify impacts and require appropriate mitigation. This was the conclusion reached by the California Department of Fish and Game ("CDFG") Senior Environmental Scientist Tonya Moore at the evidentiary hearing on August 18, 2010. Ms. Moore explained that the SSA errata #2 and the Applicant's desert tortoise translocation plan collectively do not provide adequate information about the translocation effort proposed by the Applicant. The Applicant failed to identify adequate space at receptor sites for translocated tortoises and failed to analyze impacts to the receptor sites themselves:

MS. MOORE: First, it should be noted, the department has never permitted ... a project this large for this amount of tortoises. In fact, the region has never permitted this number, and the largest number of desert tortoises permitted by the department in incidental take permit that I could find was one that went up to about 54 desert tortoises. So evaluating this information and analyzing it is actually at this scale is a first for the department. And so we're trying to make sure that we're analyzing it correctly. That said, as far as the information [in the SSA], I believe that it -- it is not adequate enough to determine whether this project is fully mitigated for. It's lacking some information. (Hearing 8/18/10, Tr. pp. 265-266.)

MS. MOORE: ...it appears to us that we don't have enough translocation areas, we cannot anticipate and/or analyze what will happen to the recipient/host, depending on how you say it, population with the information that we have.

And therefore, we're stating that we need -- we need more information to proceed with that.

(...)

And within that staff assessment, it does state that more translocation areas need to be identified. What we're stating is it is hard to analyze what will happen to a host population when you're not sure where the host population is and/or all the impacts of that host population. (Hearing 8/18/10, Tr. pp. 270-271.)

CDFG's opinion constitutes substantial evidence that Staff has not adequately analyzed the Project's significant unmitigated impacts to desert tortoise. CURE's expert witness, Scott Cashen, similarly presented substantial evidence that the Applicant's desert tortoise translocation plan is not adequate and is unsupported:

Generally, the Applicant's Desert Tortoise Translocation Plan failed to build on the lessons learned from Fort Irwin. Instead, the Applicant has submitted a Desert Tortoise Translocation Plan with little scientific rigor, and it is plagued by a lack of planning and effort. Were the Translocation Plan implemented as currently proposed, it is my professional opinion that translocation of desert tortoises from the proposed Project site would very likely result in significant desert tortoise mortality, contributing to further declines of the species. (Exh. 443, p. 5.)

The Fort Irwin translocation project is the most recent, large-scale project involving translocation of desert tortoises. (Exh. 443, p. 3.) It includes extensive financial and personnel resources, rigorous scientific study and monitoring, and tortoise health assessments that incorporate novel and extensive laboratory analyses. (*Id.*) Arguably, the Fort Irwin translocation project incorporated the best available scientific information on the techniques and analyses necessary to promote survivorship of translocated tortoises. (*Id.*) Despite these well-intentioned efforts, however, the Fort Irwin translocation project failed to provide a viable solution to prevent significant desert tortoise deaths. (*Id.*)

Given the results of the Fort Irwin translocation project, CURE's expert, Scott Cashen, concluded that most of the tortoises that the Applicant proposes to translocate off the Calico Solar Project site will likely die. (*Id.*)

Before undertaking a project, the lead agency must assess the environmental impacts of all reasonably foreseeable phases and components of a project. (*Laurel Heights Improvement Assn v. Regents of the University of California* (1988) 47 Cal.3d 376, 396-97.) CEQA requires that all potential impacts be analyzed and all significant impacts be mitigated, *including impacts from mitigation measures* 

themselves. Where mitigation measures would cause significant environmental impacts, CEQA requires an evaluation of those secondary (indirect) impacts. (14 Cal. Code Reg. § 15064(d).)

If the Commission licenses the Project without identifying the receptor sites and significant impacts from translocation of desert tortoise to the receptor populations, the Commission would violate CEQA.

## 3. STAFF'S REVISED ANALYSIS MUST BE CIRCULATED FOR PUBLIC REVIEW AND COMMENT

The SA and SSA simply did not inform the interested public about the magnitude of the impacts to desert tortoise. Now, at the last minute, revised assessments and an increasing number of potential deaths of desert tortoise are being revealed to the public. The number of tortoises estimated to be affected by the Project increased six-fold, and the number of tortoises expected to perish is staggering.

CEQA does not require recirculation for each and every project change, but CEQA does require the renoticing and recirculation when significant new information is added to the Commission's environmental review document following public review but before certification. The CEQA Guidelines clarify that new information is significant if "the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect."

The purpose of recirculation is to give the public and other agencies an opportunity to evaluate the new data and the validity of conclusions drawn from it.<sup>3</sup> Clearly the dramatic increases in the numbers of desert tortoise that are expected to die as a result of the Project are substantial enough to require the Commission to re-notice and recirculate the Staff Assessment. The public must be given an opportunity to weigh in on the wisdom of this translocation effort. The Committee must revise the schedule to incorporate this legally mandated procedure.

It is unreasonable to expect the public to follow this complex process and read every SA, SSA and SSA errata that is released in order to be able to understand the magnitude of the impacts from this Project. Significantly, <u>none of these</u> <u>supplemental assessments were circulated for a 30-day public review and comment period</u>. It is unreasonable to expect the public to immediately review and digest these materials at the 11<sup>th</sup> hour, and it violates CEQA. Neither the SA nor the SSA

<sup>&</sup>lt;sup>1</sup> Pub. Resources Code, § 21092.1.

<sup>&</sup>lt;sup>2</sup> CEQA Guidelines, § 15088.5.

<sup>&</sup>lt;sup>3</sup> Save Our Peninsula Comm. v. Monterey County Bd. of Supervisors (1981) 122 Cal.App3d 813, 822.

adequately sounded "the alarm" that an EIR is intended to do, because the document that was circulated, the SA, simply did not contain the information and analyses required by CEQA and its implementing guidelines to be functionally equivalent to an EIR.<sup>4</sup>

In addition to significant impacts to 682 federally and state threatened desert tortoises, the Project may also significantly impact the long term viability of nearby tortoise preserves. The Project lies between two desert wildlife management areas ("DWMA"): Ord-Rodman and Superior-Cronese. These DWMAs were specifically established as recovery units for desert tortoise. The project may directly impact these DWMAs by translocating tortoises into them and will fragment the movement corridor between these DWMAs, further inhibiting the genetic exchange that could be essential to the long-term viability of the tortoise populations in the DWMAs.

# 4. NO SUBSTANTIAL EVIDENCE SHOWS THAT PROJECT CHANGES ALONG THE NORTHERN BOUNDARY MITIGATE IMPACTS TO DESERT TORTOISE MOVEMENT

The Applicant argued that the reduction of the Project size along the Northern boundary reduces impacts to the east-west movement of desert tortoise and other wildlife. However, the Applicant has no substantial evidence to support its assumption.

USFWS biologist Ashleigh Blackford testified that a 4,000 foot corridor was the minimum acceptable corridor for the movement of desert tortoise. (Hearing 8/5/10, Tr. p. 227.) Jeff Aardahl testified that the area north of the Project site is not adequate to maintain the connectivity for tortoise recovery areas.

MR. AARDAHL: My judgment is, is that the 1,100-acre exclusion area was developed probably with good intentions in mind, but I personally don't think that it's nearly adequate enough to maintain and assure a high degree of connectivity across the landscape and especially connectivity between the Western Mojave, the Eastern Mojave, and the Northern Colorado recovery areas. The project site is basically at the convergence of all three of those recovery units and to me, its connectivity and its importance on the landscape has not been adequately assessed and revealed in the documents.

(Hearing 8/5/10, Tr. p. 212.)

<sup>&</sup>lt;sup>4</sup> Pub. Resources Code, § 21100; CEQA Guidelines, §§ 15120(c), 15122-15131.

Scott Cashen testified that there would be several bottlenecks in the area north of the site between the Project fence and the toe of the Cady Mountains and, at times, those bottlenecks would be as narrow as approximately 2,400 feet. (*Id.* at p. 233.) Therefore, this northern area does not provide the minimum 4,000 foot corridor in all areas. Where the "corridor" constricts, it presents risk to desert tortoise from edge effects such as shading, weeds and heightened predator populations. (Hearing 8/5/10, Tr. pp. 241-242.)

Since Staff assumed that the Northern area provides a habitat corridor for desert tortoise, Staff did not find a significant impact to the east-west corridor for desert tortoise and other wildlife. However, due to corridor constrictions, the area to the north of the Project is not wide enough to accommodate the safe movement of tortoises. The Commission must find that the area north of the Project site does not reduce significant impacts to the east-west movement to desert tortoise.

# IV. THE STAFF ASSESSMENT FAILED TO MITIGATE SIGNIGICANT IMPACTS TO FORAGE HABITAT AND MOVEMENT CORRIDORS FOR BIGHORN SHEEP

Nelson's bighorn sheep, a BLM sensitive species, inhabits the Cady Mountains adjacent to the Project, where its population consists of at least 300 animals. (Exh. 300, p. ES-23.) Nearly 1,100 acres of habitat currently available to bighorn sheep for foraging will be permanently lost due to Project development, and an additional 400 acres of spring foraging habitat will incur secondary impacts associated with noise along the northern boundary of the Project. (Exh. 413, p.1.)

The Project's destruction of foraging habitat, when coupled with other sources of disturbance (SunCatcher noise, avoidance of manmade structures and activity and surrounding habitat; increased disturbance from public traffic on a new northern boundary road; and the introduction or spread of non-native, invasive plants) to which sheep may be sensitive, are significant. These significant impacts have the potential to negatively impact the population of bighorn sheep inhabiting the Cady Mountains. (*Id.*)

During reconnaissance surveys conducted in winter 2010 for golden eagles, the Applicant detected 62 sheep within 10 miles of the proposed project. (Exh. 300, p. ES-23.) Although Staff concluded that the Project would result in the loss of approximately 1,078 acres of spring foraging habitat, Staff inexplicably failed to require any mitigation for the loss of this habitat.

Moreover, Staff failed to find that the Project would significantly impact a movement corridor for bighorn sheep. This is perplexing, because, according to renowned bighorn expert, Dr. Vernon Bleich, the Project site is located in an area

identified as an essential biological connectivity area between the Bristol and Ord Mountains. (Exh. 413, p. 1.)

Dr. Bleich testified to the importance of maintaining connectivity and the potential for recolonization by avoiding disruption of natural dispersal routes. Dr. Bleich recommended bridging anthropogenic barriers to help ensure connectivity among subpopulations of bighorn sheep. It is undisputed that the Project provides forage habitat, and Dr. Bleich provided unrebutted testimony that the Project area also provides a movement corridor for bighorn sheep.

Staff's failure to adequately analyze and mitigate significant impacts to bighorn sheep forage and movement violates CEQA.

# V. THE SSA FAILS TO PROVIDE AN ACCURATE BASELINE FROM WHICH TO ANALYZE IMPACTS TO GOLDEN EAGLE AND MITIGATION IN THE SSA IS INADEQUATE

## 1. STAFF HAS NOT ADEQUATELY ESTABLISHED THE BASELINE FOR IMPACTS TO GOLDEN EAGLE

The Project's large scale land use conversion would remove 10-square miles that is potential foraging habitat for golden eagle. The Project may also impact golden eagle due to the Project's design (large mirrored disks).

Golden eagles were detected on March 11 and 12, 2010, during a helicopter reconnaissance survey. This sighting indicated that one active nest that contained an incubating adult golden eagle and approximately eight inactive, but potential golden eagle nests, were present within a ten-mile radius of the project. (Exh. 300, p. C.2-87.) The active nest is located approximately 3.5 miles east of the proposed Project area. (*Id.* at C.2-88.) Even though an active nest was detected, the Applicant failed to conduct golden eagle surveys in accordance with USFWS regulations and, therefore, failed to establish the Project baseline for impacts to golden eagles.

The environmental setting, or baseline, refers to the conditions on the ground and is a starting point to measure whether a proposed project may cause a significant environmental impact. CEQA defines "baseline" as the physical environment as it exists at the time CEQA review is commenced. (14 Cal. Code Reg. §15125(a); *Riverwatch v. County of San Diego* (1999) 76 Cal.App.4th 1428, 1453.)

New regulations proposed by the USFWS indicate the USFWS may consider the loss of the forage habitat on the Project site to constitute substantial interference with normal breeding, feeding, or sheltering behavior, which would be considered a "take." (Exh. 430.) The USFWS has established minimum inventory

and monitoring efforts that "are essential components" to avoiding and minimizing disturbance and other kinds of take of golden eagles. (Exh. 430, p. 2.) Research indicates golden eagles selectively use available habitat, and that they concentrate their foraging activities in select "core" areas. (Exh. 424, p. 10.)

Although this protocol exists for golden eagle surveys, protocol surveys for golden eagle were never conducted. Failure to conduct protocol surveys violates the Commission's regulations. Specifically, the Commission's regulations require the Applicant to follow protocol surveys if such protocols exist. (20 Cal. Code Reg. App. B (g)(13)(D)(i).) Moreover, since the Applicant failed to conduct protocol golden eagle surveys, the Commission does not have substantial evidence to make a finding that the Project won't result in a take of a golden eagle. Thus, the approval of the Project may result in an unanalyzed take of golden eagle in violation of the Bald and Golden Eagle Act. (16 U.S.C. 668-668d.) Project approval may also violate the California Endangered Species Act, because golden eagles are designated as "fully protected" under California law (California Fish & Game Code §§ 3511) and thus may not be taken or possessed.

According to CURE's expert biologist, Scott Cashen, the Project could eliminate a substantial amount of core habitat (perhaps all) used by at least one pair of breeding eagles. (Exh. 424, p. 10.) Mr. Cashen concluded that the SSA's requirement that the Applicant acquire compensation land to help conserve foraging habitat for some eagle(s) may be of little consequence to the eagle(s) whose core habitat has been eliminated by the Project. (*Id.*) The compensatory mitigation plan recommended by Staff provides no provisions to ensure significant impacts to golden eagle foraging habitat would be mitigated to a level considered less than significant. (*Id.*) Finally, loss of core foraging habitat may result in nest failure and a violation of the Eagle Act. (*Id.*) This loss was never adequately quantified or mitigated. Consequently, by failing to establish the baseline environmental setting for golden eagle, Staff failed to satisfy CEQA's requirement that the baseline be determined as the first step in the environmental review process. Staff also failed to conduct an adequate analysis, failed to identify mitigation and failed to recognize a violation of LORS.

If the Commission approves the Project as proposed, the Commission will violate CEQA as a matter of law and cannot certify that the Project is consistent with the Bald and Golden Eagle Protection Act.

## 2. STAFF'S PROPOSED MITIGATION FOR IMPACTS TO GOLDEN EAGLE IS INADEQUATE

CEQA requires agencies to "avoid or minimize environmental damage where feasible." (14 Cal. Code Reg. § 15021(a).) CEQA also prohibits agencies from approving projects "if there are feasible alternatives or feasible mitigation measures

available which would substantially lessen the significant environmental effects of such projects." (Pub. Res. Code §§ 21002, 21081.)

The SSA determined that impacts to golden eagles could be mitigated by annual surveys and adaptive management. (Exh. 300, p. C.2-226.) Condition of Certification BIO-20 requires that "[f]or each calendar year during which construction will occur an inventory shall be conducted to determine if golden eagle territories occur within one mile of the Project boundaries." (*Id.*) The condition subsequently specifies the minimum data required for the inventory. The Applicant plans to initiate construction this calendar year (i.e., 2010) but has undertaken no effort to provide this baseline golden eagle presence data for 2010. Therefore, the Applicant is unable to comply with the conditions set forth in BIO-20.

Additionally, Staff's conditions would require the Applicant to design and implement an adaptive management program if an occupied nest is detected within one mile of the Project boundaries. Then, if evidence of Project-related disturbance to nesting golden eagles, including but not limited to: agitation behavior (displacement, avoidance, and defense); increased vigilance behavior at nest sites; changes in foraging and feeding behavior, or nest site abandonment occur, the Applicant will need to take some sort of unspecified remedial action. (*Id.*) However, no justification is given for why the Applicant would only have to mitigate impacts to eagles nesting within one mile. Moreover, it is unclear how the Applicant would know that the golden eagles were exhibiting agitated behavior or other signs of disturbance since there is no requirement for ongoing monitoring of eagle disturbance built into the conditions. This mitigation would be ineffective and violates CEQA.

## VI. THE SSA FAILS TO ADEQUATELY ANALYZE SIGNIFICANT IMPACTS TO MOJAVE FRINGE-TOED LIZARD

The Mojave fringe-toed lizard occurs on the proposed project site, in areas of fine wind-blown sand deposits, such as dunes, washes, and sandy patches within scrubby vegetation. (Exh. 300, pp. ES-21 to ES-22.) The Project would interfere with sand deposits on and near the site, which would result in habitat loss and degradation for this and other sand-associated species and direct impacts to occupied habitat. (*Id.*) The applicant reported approximately 16.9 acres of Mojave fringe-toed lizard habitat onsite, which is concentrated in a small dune complex in the southern portion of the site. (*Id.*) However, during site reconnaissance visits conducted in January and May 2010, Staff noted that suitable habitat for this species was more extensive. In May, Staff observed several Mojave fringe-toed lizards outside the habitat area as originally reported. Staff estimates total acreage of suitable habitat is 164.7 acres, a number that is ten times greater than proposed by the Applicant. (*Id.*)

Staff believes that avoidance of habitat on-site would not prevent significant adverse impacts to Mojave fringe-toed lizards due to habitat fragmentation, road kill, and increased predation (project facilities would serve as perch sites for foraging raptors, facilitating their ability to find and capture lizards and other ground-dwelling species). (*Id.*)

## 1. STAFF IMPROPERLY DEFERRED ANALYSIS OF THE BASELINE UNTIL AFTER PROJECT APPROVAL

The baseline refers to the existing environmental setting and is a starting point to measure whether a proposed project may cause a significant environmental impact. (See, e.g., Communities for a Better Environment v. South Coast Air Quality Management District (2010) 48 Cal.4th 310, 316; Fat v. County of Sacramento (2002) 97 Cal.App.4th 1270, 1278.) CEQA defines "baseline" as the physical environment as it exists at the time CEQA review is commenced. (CEQA Guidelines, § 15125(a); Riverwatch v. County of San Diego (1999) 76 Cal.App.4th 1428, 1453.)

Describing the environmental setting is critical to an accurate, meaningful evaluation of environmental impacts. The importance of having a stable, finite, fixed environmental setting for purposes of an environmental analysis was recognized decades ago. (*County of Inyo, v. City of Los Angeles* (1977) 71 Cal.App.3d 185.) Today, the courts are clear that, "[b]efore the impacts of a project can be assessed and mitigation measures considered, an [environmental review document] must describe the existing environment. It is only against this baseline that any significant environmental effects can be determined." (*County of Amador v. El Dorado County Water Agency* (1999) 76 Cal.App.4th 931, 952.) In fact, it is:

a central concept of CEQA, widely accepted by the courts, that the significance of a project's impacts cannot be measured unless the EIR first establishes the actual physical conditions on the property. In other words, baseline determination is the first rather than the last step in the environmental review process. (Save Our Peninsula Committee v. Monterey County Bd. of Supervisors (2001) 87 Cal.App.4th 99.)

Although Staff went to the site to determine whether the Applicant's estimates of suitable habitat were accurate and has attempted to provide a more accurate estimate of the amount of habitat that would be affected by the Project, the SSA was unable to provide a final estimate of habitat loss and direct significant impacts to Mojave fringe-toed lizard. (Exh. 424, p. 11.)

Once Staff determined that the Applicant's estimates were unreliable, Staff should have required that the Applicant provide revised and accurate baseline data for existing habitat on the proposed Project site. Instead, Staff deferred a

determination of the baseline until after Project approval by requiring the Applicant to comply with Condition of Certification BIO-13. (*Id.*) The condition requires the Project owner to provide a delineation of existing habitat for Mojave fringe-toed lizards after Project approval. (*Id.*) The SSA does not establish when the delineation would be conducted, nor a valid reason for its deferral. (*Id.*) Additionally, there are no verification measures built into the condition of certification to assure an accurate assessment of habitat loss and direct impacts to Mojave fringe-toed lizard before ground disturbance begins.

Therefore, Staff deferred obtaining the baseline data, which is the starting point for developing a legally adequate environmental analysis under CEQA, until after the Project is approved. This turns CEQA on its head and it is legally invalid.

2. STAFF FAILED TO ANALYZE THE PROJECT'S SIGNIFICANT IMPACTS TO METAPOPULATION DYNAMICS; DIRECT AND CUMULATIVE IMPACTS TO MOJAVE FRINGE-TOED LIZARD POPULATION NOT ADEQUATELY ANALYZED OR MITIGATED

The Project could have numerous onsite and offsite impacts to Mojave fringe-toed lizards and their habitat from compaction of soils; the introduction of exotic plant species; alterations to the existing hydrological conditions; alterations in the existing solar regime from shading; modification of prey base; and altered species composition. (Exh. 424, p. 12.) Further, the placement of fencing and other structures would provide roosting opportunities for avian predators that target lizard prey. (*Id.*) Studies show that fencing depletes lizard populations around the edges of human development. (*Id.*)

Even with Staff's recommended Condition of Certification BIO-13, the Project's contribution to a significant cumulative impact on Mojave fringe-toed lizard would be considerable. This is primarily due to the net habitat loss and interruption of suitable breeding and dispersal habitat between occupied habitat to the east and west. (Id.) Nonetheless, the SSA proposes no additional mitigation for the Project's cumulative impact. Given the population dynamics exhibited by this species, including its reliance on a functioning metapopulation structure to persist, biologist Scott Cashen concluded that the cumulative impacts scenario presented in the SSA would result in the extirpation of the Mojave fringe-toed lizard from the region. (Id.)

It is undisputed that cumulative impacts to Mojave fringe-toed lizard have not been adequately analyzed or mitigated. The Commission cannot approve this Project without additional analysis and mitigation for significant impacts to Mojave fringe-toed lizard.

## VII. THE SSA FAILS TO ADEQUATELY ANALYZE SIGNIFICANT IMPACTS TO SPECIAL-STATUS BAT SPECIES

The West Mojave Plan ("WMP") was created "to develop management strategies for the desert tortoise, Mojave ground squirrel and over 100 other sensitive plants and animals that would conserve those species throughout the Western Mojave Desert, while at the same time establishing a streamlined program for compliance with the regulatory requirements of FESA and CESA."<sup>5</sup>

Included in the list of roughly 100 sensitive plants and animals governed by the WMP are 6 species of bats that require specific consideration. Staff failed to require bat surveys for the Project.

The Townsend's big-eared bat is known to occur on the Project site. Several other bat species also are likely to occur. Potential roost sites for bats occur in the Project area (i.e., railroad trestles, and rock outcroppings) and bats are known to roost in the nearby Pisgah Crater. In addition, the Applicant submitted a geologic map depicting two mines (one of which is labeled "abandoned mine works") near the Project boundary. The WMP identifies the potential for mines in the Project area to have significant (i.e., important) bat roosts. Despite this fact, none of the Applicant's biological resource maps show these mines, and the Applicant has not provided any information on how the Project might affect bat roosts that occur in the mines. Because bats are extremely susceptible to noise and other forms of human disturbance, and because viable roost sites are essential to maintaining bat populations, an assessment of Project impacts on bats must be provided.

## 1. SURVEY PROTOCOLS VIOLATE THE WEST MOJAVE PLAN

The WMP does not permit the loss of significant roosts, and specific procedures must be followed for surveys and to allow for safe exit of bats. (*Id.*) Under the WMP, take of bats and their roosting habitat is limited to sites harboring 10 or fewer bats.<sup>6</sup> Since the Applicant did not conduct a survey for roosts that would be directly impacted by the Project, the Commission cannot make a finding that the Project complies with the WMP.

<sup>&</sup>lt;sup>5</sup> Bureau of Land Management. 2005. Final environmental impact report and statement for the West Mojave Plan: a habitat conservation plan and California desert conservation area plan amendment. Moreno Valley (CA): U.S. Dept. of the Interior, Bureau of Land Management, California Desert District, Opening Letter.

<sup>&</sup>lt;sup>6</sup> Bureau of Land Management. 2005. Final environmental impact report and statement for the West Mojave Plan: a habitat conservation plan and California desert conservation area plan amendment. Moreno Valley (CA): U.S. Dept. of the Interior, Bureau of Land Management, California Desert District, Chapter 2, p. 2-46.

## 2. ROOST REMOVAL MEASURES ARE INCONSISTENT WITH WMP GUIDELINES AND PROTOCOL

Under the WMP, the presence of alternative maternity roosting sites in the area does not allow for disruption and/or take of "significant" roosts nor is there a provision for take of "significant" roosts if alternative roosting sites are available.

Staff attempted to mitigate significant impacts to special-status bats through the Condition of Certification BIO-25, even though no baseline data was provided and no impact analysis was conducted. BIO-25 would require surveys prior to ground disturbance and if active maternity roosts or hibernacula are found, the rock outcrop or trestle occupied by the roost shall be avoided (i.e., not removed) by the project, if feasible. (Exh. 300, p. C.2-233.) If avoidance of the maternity roost is not feasible, the bat biologist shall survey for nearby alternative maternity colony sites. (Id.) If the bat biologist determines that there are alternative roost sites used by the maternity colony and young are not present, then no further action is required. However, if there are no alternative roost sites used by the maternity colony, provision of substitute roosting bat habitat is required. (Id.) BIO-25 is a direct violation of the WMP.

The Commission may not approve this Project until the Applicant provides baseline data, Staff evaluates that data and determines impacts and mitigation si developed that is consistent with the West Mojave Plan.

# VIII. STAFF FAILED TO DEMONSTRATE THAT THE PROPOSED COMPENSATORY MITIGATION FOR SIGNIFICANT IMPACTS TO SPECIAL STATUS SPECIES AND THEIR HABITAT WILL BE FEASIBLE, EFFECTIVE AND CAPABLE OF IMPLEMENTATION

Staff determined that the project owner must *purchase approximately* 18,761 acres of desert tortoise habitat to compensate for significant impacts to desert tortoise. In the alternative, the Applicant may pay a fee in-lieu instead of purchasing the land directly. Staff provided no analysis beyond pure speculation that sufficient or adequate land is available that would fully mitigate impacts to desert tortoise.

CEQA requires the Commission to formulate mitigation measures that are defined, feasible, effective, and capable of implementation. (14 Cal. Code Reg. §

<sup>&</sup>lt;sup>7</sup> Staff originally determined that the purchase of 14,365 acres of desert tortoise habitat would be required but at the 8/18/10 hearing, the CDFG and Energy Commission Staff determined that this number would be adjusted upwards to account for the change from a 3:1 required mitigation on certain Project areas to a 5:1 mitigation. The recalculated acreage has not been provided in a Staff report and so this number is an estimate. (8/18/2010 Hearing Tr. p. 284.)

15126.4(a)(1)(B); Federation of Hillside and Canyon Associations v. City of Los Angeles (2000) 83 Cal.App.4th 1259, 1262.) Under CESA, CDFG may issue a permit that authorizes "take" of protected species, so long as the holder of the permit "fully" mitigates the impacts. (Fish & Game Code §§ 2080, 2081(b)(2).) The measures required to fully mitigate impacts to species "shall be capable of successful implementation." (Id. at § 2081(b)(2).)

Under the federal ESA, BLM must "insure that any action authorized, funded, or carried out by such agency . . . is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species which is determined by the Secretary . . . to be critical. . . ." (ESA § 7(a)(2); 16 U.S.C. § 1536(a)(2).) USFWS must specify, among other things, "reasonable and prudent measures that the [agency] considers necessary or appropriate to minimize such impact." (ESA § 7(b)(4); 16 U.S.C. § 1536(b)(4).)

The record does not contain substantial evidence showing that the proposed acquisition of compensation lands can be implemented or will be feasible or effective. Rather, substantial evidence shows that in light of the surge of immense solar power projects throughout the region, it is simply unrealistic to expect that the Applicant will be able to acquire nearly 19,000 acres of equivalent or better habitat to compensate for the destruction of habitat for desert tortoise that this Project will cause. Compensation land for the Project has not been identified. Moreover, as Mr. Cashen testified, purchasing numerous smaller pieces of land will not compensate for the loss of one large intact piece of land that currently supports a reproducing desert tortoise population.

MR. CASHEN: And the consensus among the desert tortoise experts ... and the recovery plan is that a large block of contiguous intact high-quality habitat is essential for the species. And the reason that I bring this up is because we've had some discussion this morning about the cost associated with acquisition and BLM and staff have both concluded that in order to meet the mitigation requirements that Applicant was going to have to purchase several parcels. Multiple. There was no single large parcel out there to purchase to satisfy the mitigation requirements. And so in doing so, we've exchanged one large block of habitat for several smaller ones which we -- which the desert tortoise community has agreed is not as valuable as one large block of habitat. (8/5/2010 Hearing Tr. pp. 195-196.)

There is no evidence in the record that this substantial amount of privatelyowned acreage – of equivalent or better habitat function and value for all of the species significantly impacted by the Project – is available for purchase. In light of the current wave of renewable energy projects being proposed within the region, it is questionable that this vast amount of suitable habitat acreage can be acquired.

Proposing mitigation that requires the acquisition of this amount of suitable habitat without determining whether such habitat is available, and without limiting physical changes to the environment prior to habitat acquisition, is a form of improper deferral of mitigation. Proposing mitigation without more of an effort to ensure the mitigation is adequate and will be implemented as advertised defers the determination of whether mitigation is feasible. (Defend the Bay v. City of Irvine (2004) 119 Cal.App.4th 1261, 1275, citing Gentry v. City of Murrieta (1995) 36 Cal.App.4th 1359, 1396-1397.) The details of mitigation may only be deferred until after Project approval in limited circumstances. (San Joaquin Raptor Rescue Center v. County of Merced (2007) 149 Cal. App. 4th 645, 670-671, quoting Endangered Habitats League Inc. v. County of Orange (2005) 131 Cal.App.4th 777, 793.) Deferral is permissible only where the adopted mitigation: (1) commits the agency to a realistic performance standard or criterion that will ensure the mitigation of the significant effect; and (2) disallows the occurrence of physical changes to the environment unless the performance standard is or will be satisfied. (See Remy et al., Guide to the California Environmental Quality Act (11th ed. 2007), p. 551.)

Staff's proposed compensation land scheme does not satisfy either of the above requirements. First, the proposal is unrealistic because it demands the availability of nearly 19,000 acres of habitat for desert tortoise that is equal to or better in quality than that of the Project site. As discussed above, given the immense number of acres slated for other projects in the region that will also require compensation lands, it is unrealistic to simply assume that there is enough suitable habitat available for all of the proposed projects.

Without substantial evidence concerning the effectiveness of the proposed compensation land mitigation, the Commission cannot make required findings. Because the record does not contain substantial evidence supporting the conclusion that mitigation through the acquisition of vast acreages of compensation land is feasible and is capable of implementation, the Commission cannot find "that changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the effect..." (Pub. Res. Code § 21081(a); 14 Cal. Code Reg. § 15091(a).)

# IX. STAFF FAILED TO ANALYZE POTENTIALLY SIGNIFICANT IMPACTS FROM TRANSMISSION UPGRADES THAT ARE NECESSARY FOR PROJECT OPERATION

The Supplemental Staff Assessment Errata identifies the following major transmission facility upgrades as a condition-precedent for the Project to operate (among others):

#### **Pisgah Substation Expansion**

The existing 5-acre Pisgah Substation would be expanded to approximately 40 acres to accommodate new electrical and communication facilities, including up to four AA banks (two AA-banks would initially be installed for the proposed Calico Solar Project) and new 500 kV and 220 kV switchracks. However, once final engineering is completed, the substation may be sized up to 100 acres to accommodate for future growth. Depending on land availability and engineering, the expanded/new Pisgah Substation would likely be constructed along the existing ROW in the approximately 6-mile area between the existing Pisgah Substation and the mountains to the southwest. However, the exact location of the new/expanded substation has not been determined and so a full analysis of its impacts is not possible at this time. (Exh. 304, p. B.3-20 (emphasis added).)

#### 500 kV Transmission Line Scope (Lugo-Pisgah No. 2)

The proposed 850 MW Full Build-Out option would consist of the construction of a single-circuit 500 kV transmission line on 57.1 miles of existing ROW and 9.8 miles of **new ROW**. The existing 220 kV Lugo-Pisgah No. 2 transmission line would be replaced with the new 500 kV single-circuit structures. The Lugo-Pisgah No. 2 500 kV transmission line would begin at the new Pisgah 500 kV/220 kV Substation. The proposed line would exit the substation to the northeast, and then wrap around the south side of the substation for approximately 0.6 miles before joining the existing Lugo-Pisgah No. 2 ROW. The line would then head southwest along the existing Lugo-Pisgah No. 2 ROW for approximately 56.7 miles until it would reach the eastern edge of the Mojave River. The proposed line would then head south on a new ROW along the east side of the river for approximately 1.6 miles before crossing to the west side of the river. The line would then continue west on new ROW for approximately 7.6 miles before rejoining the existing Lugo-Pisgah No. 2 ROW for another 0.4 miles into the existing Lugo Substation where it would terminate.8

Staff concluded that these transmission upgrades must be analyzed as a part of the "whole of the project" under CEQA. As explained by Staff, specific information would be required to analyze significant impacts associated with the transmission upgrades:

"The following is in response to your request for an identification of the information needed for staff to analyze the reasonably foreseeable

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<sup>8</sup> Id. at B.3-21.

impacts of the Pisgah-Lugo transmission line upgrade for the proposed Stirling Energy Systems Solar One (SES Solar One) Project.

#### **Biological Resources**

- Complete special-status species surveys for both plants and animals done when the organisms are identifiable (meaning multiple trips out, especially for plants);
- Delineation of waters of the U.S. and state; and
- Breakdown of temporary vs. permanent impact acreage in the various habitat types, with acreage for each habitat type.

#### **Cultural Resources**

- Complete description of the upgrade and the construction methods involved;
- Pedestrian cultural resources survey of no less than 25 percent of the transmission line ROW and regulatory buffer zone, sample structure to be developed in consultation with the BLM and the CEC:
- Appropriate additions to background sections to cover regions not covered in the original technical report.

#### Soil and Water Resources

- Delineation of waters of the U.S. and state crossed by the alignment:
- Identify locations where the alignment crosses 100 year flood ones;
- Identify depth of foundations to assess impact to ground water:
- Provide slope gradients traversed by alignment/roads;
- Provide road construction methods (side cast, haul and store);
- Provide information on erodibility of soils in project area;
- Identify plans for erosion/sedimentation control (BMPs); and
- Identify any locations where the alignment crosses environmental hazard areas."

(Memo from Christopher Meyer to Felicia Bellows, dated October 21, 2009, Exhibit 438.)

The Applicant did not provide most of the information requested and Staff did not otherwise independently obtain this information. Staff's assessment stated that undetermined areas of ROW and the unknown location of the Pisgah substation precluded the full analysis of environmental impacts. Rather than waiting for these parts of the whole of the Project to be better defined, Staff chose to conclude its analysis anyway. Staff's failure to evaluate the potentially significant impacts from these upgrades violates CEQA's requirement that Staff analyze the "whole of the project."

Under CEQA, the definition of "project" is "given a broad interpretation in order to maximize protection of the environment." (Lighthouse Field Beach Rescue v. City of Santa Cruz (2005) 131 Cal.App.4th 1170, 1180 (internal quotation omitted); see also, Muzzy Ranch Co. v. Solano County Airport Land Use Com. (2007) 41 Cal.4th 372, 381-83; Fullerton Joint Union High Sch. Dist. v. State Bd. of Educ. (1982) 32 Cal.3d 779, 796-97; Bozung v. Local Agency Formation Com. (1975) 13 Cal.3d 263, 277-81.) A "project" is "the whole of an action" directly undertaken, supported or authorized by a public agency "which may cause either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment." (Pub. Res. Code § 21065; 14 Cal. Code Regs. § 15378(a).) Under CEQA, "the term 'project' refers to the underlying activity and not the governmental approval process." (California Unions for Reliable Energy v. Mojave Desert Air Quality Mgmt. Dist. (2009) 178 Cal.App.4th 1225, 1241, (quoting Orinda Assn. v. Bd. of Supervisors (1986) 182 Cal. App. 3d 1145, 1171-72.) (14 Cal. Code Regs. § 15378(c) ("The term 'project' refers to the activity which is being approved and which may be subject to several discretionary approvals by governmental agencies. The term 'project' does not mean each separate governmental approval.").)

Failure to consider all phases of a Project constitutes "piecemealing" of a single project into two or more separate phases. CEQA prohibits piecemealing and requires the CEQA document to analyze the "whole project." CEQA mandates "that environmental considerations do not become submerged by chopping a large project into many little ones -- each with a minimal potential impact on the environment -- which cumulatively may have disastrous consequences." (*Bozung v. LAFCO* (1975) 13 Cal.3d 263, 283-84; *City of Santee v. County of San Diego*, (1989) 214 Cal.App.3d 1438, 1452.)

Before undertaking a project, the lead agency must assess the environmental impacts of all reasonably foreseeable phases of a project. (*Laurel Heights Improvement Assoc. v. Regents of the Univ. of Calif.* (1988) 47 Cal.3d 376, 396-97, 253 Cal.Rptr. 426). A public agency may not segment a large project into two or more smaller projects in order to mask serious environmental consequences. As the Second District stated:

The CEQA process is intended to be a careful examination, fully open to the public, of the environmental consequences of a given project, covering the entire project, from start to finish . . . the purpose of CEQA is not to generate paper, but to compel government at all levels to make decisions with environmental consequences in mind. (Natural Resources Defense Council v. City of Los Angeles (2002) 103 Cal.App.4th 268.)

Recently, the First District Court of Appeal in Communities for a Better Environment v. City of Richmond (2010) 184 Cal.App.4th 70 ("CBE v. Richmond") described CEQA's statutory and regulatory requirements and existing case law regarding whether a lead agency unlawfully segmented its environmental review of a project under CEQA. The Court of Appeal explained that "[t]here is no dispute that CEQA forbids 'piecemeal' review of the significant environmental impacts of a project." (Id. at p. 98, citing Berkeley Keep Jets Over the Bay Com. v. Board of Port Cmrs. (2001) 91 Cal.App.4<sup>th</sup> 1344, 1358 ("Berkeley Jets").) Rather, CEQA mandates "that environmental considerations do not become submerged by chopping a large project into many little ones -- each with a minimal potential impact on the environment -- which cumulatively may have disastrous consequences." (Id., citing Bozung v. Local Agency Formation Com. (1975) 13 Cal.3d 263, 283-284.) Thus, CEQA defines "project" broadly as "the whole of an action, which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment . . . . " (Id., citing 14 Cal. Code Regs. § 15378(a).) The court explained that the question of which acts constitute the "whole of an action" for purposes of CEQA is "one of law which we review de novo based on the undisputed facts in the record." (Id., citing Tuolumne County Citizens for Responsible Growth, Inc. v. City of Sonora (2007) 155 Cal.App.4th 1214, 1224 ("Tuolumne County").)

The Court of Appeal first looked to the California Supreme Court's decision in Laurel Heights Improvement Assn. v. Regents of the University of California (1988) 47 Cal.3d 376 that set aside an EIR for failing to analyze the impacts of a reasonably foreseeable second phase of a multi-phased project. The EIR in that case analyzed a university plan to move its school to a new building, of which only about one-third was initially available to UCSF. The EIR failed to analyze the environmental effects of the eventual occupation of the remainder of the building once that space became available. The Court required an analysis of the environmental impacts of a future expansion or other action if: (1) "it is a reasonably foreseeable consequence of the initial project;" and (2) "the future expansion or action will be significant in that it will likely change the scope or nature of the initial project or its environmental effects." (CBE v. Richmond at p. 19, citing Laurel Heights, 47 Cal.3d at 390.)

In *CBE v. Richmond*, the Court summarized existing case law requiring environmental review of related projects.

Some courts have concluded a proposed project is part of a larger project for CEQA purposes if the proposed project is a crucial functional element of the larger project such that, without it, the larger project could not proceed. For example, in *San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal.App.4th 713, the court concluded the description of a

residential development project in an EIR was inadequate because it failed to include expansion of the sewer system, even though the developer recognized sewer expansion would be necessary for the project to proceed. (*Id.* at pp. 729-731.) Because the construction of additional sewer capacity was a "required" or "crucial element[]" without which the proposed development project could not go forward, the EIR for the project had to consider the environmental impacts from such construction. (*Id.* at pp. 731-732.)

More recently, in *Tuolumne County*, *supra*, 155 Cal.App.4<sup>th</sup> 1214, the court held that a proposed Lowe's home improvement center and a planned realignment of the adjacent Old Wards Ferry Road were improperly segmented as two separate projects in light of the dispositive fact that the road realignment was included by the City of Sonora as a condition of approval for the Lowe's project. (*Id.* at p. 1220.) The court held that this was really one project, not two, because "[t]heir independence was brought to an end when the road realignment was added as a condition to the approval of the home improvement center project. [Citation.]" (*Id.* at 1231.)

The court also noted other decisions which did not require combined environmental review of separate projects. In National Parks & Conservation Assn. v. County of Riverside (1996) 42 Cal.App.4th 1505, the court found that an EIR for a landfill was not inadequate for failing to discuss impacts from materials recovery facilities ("MRFs") needed to process solid waste before transport to the landfill because the MRFs were not "crucial elements" without which the landfill project could go forward, and the exact location of the MRFs were not yet known. (Id. at p. 1519.) In Christward Ministry v. County of San Diego (1993) 13 Cal. App. 4th 31, the court found that even though there were a number of separate waste management projects occurring at the same time, there was "no record reflecting a contemplated larger project . . . ." that should have been considered in an EIR for a landfill expansion. (Id. at p. 46.) Furthermore, the court noted that the other projects were addressed in the cumulative impacts analysis of the EIR. (Id. at p. 47.) Finally, in Berkeley Jets, the court rejected an argument that an EIR for an airport development plan should have included long-range plans for potential runway expansions, because the potential runway expansions were unnecessary for completion of the airport plan. (Berkeley Jets, supra, 91 Cal.App.4th at pp. 1361-1362.) The court noted, the airport plan "does not depend on a new runway and would be built whether or not runway capacity is ever expanded." (Id. at p. 1362.) Because the runway expansion was not a crucial element of the airport plan or a reasonably foreseeable consequence of the airport plan, the court concluded the

EIR's project description was adequate and did not violate the policy against piecemealing. (*Id.*)

The court in *CBE v. Richmond* concluded that the facts in CBE's case presented a similar scenario to that considered in *National Parks*, *Christward Ministry*, and *Berkeley Jets*. The court found that a hydrogen pipeline to supply excess hydrogen from the refinery to consumers was not part of the refinery project because the two projects "are not interdependent." (*CBE v. Richmond* at p.101.) According to the Court,

Because Chevron's efforts to process a larger percentage of California fuel at the Refinery does not 'depend on' construction of the hydrogen pipeline, the City's treatment of the hydrogen pipeline as a separate project does not constitute illegal piecemealing. (See *Berkeley Jets*, *supra*, 91 Cal.App.4th at p. 1362.) (*Id*.)

The facts here are easily distinguished from *CBE v. Richmond* and instead present a similar scenario to those considered in *San Joaquin Raptor v. County of Stanislaus* (1994) 27 Cal.App.4<sup>th</sup> 713 and *Tuolumne County Citizens for Responsible Growth v. City of Sonora* (2007) 155 Cal.App.4<sup>th</sup> 1214. Here, the Project *is* dependent on the transmission upgrades identified in the Supplemental Staff Assessment Errata. (Exhibit 304.)

MS. MILES: ... with regard to the project area map that's up on the screen, could you tell me where the Pisgah Substation relocation would be sited?

(...)

MS. BELLOWS: Edison, to my knowledge, has not decided where -- what they're going to do with Pisgah Substation, so they very well -- one of the -- my understanding from Edison is that they are still considering simply expanding Pisgah Substation where it is located, but they're also looking at another location, and that's their decision and not ours.

(...)

MS. MILES: Has the applicant docketed any maps showing the route of the gen-tie line in the event that the Pisgah Substation is relocated?

MS. BELLOWS: We have not, because again we have no knowledge of where Edison is thinking of locating.

(...)

MS. MILES: I'm not sure if you heard my questioning earlier of Ms. Bellows regarding the transmission upgrade needed, in terms of the Pisgah Substation relocation that might be required. Did you hear that discussion?

PROJECT MANAGER MEYER: Yes I did.

MS. MILES: Do you have any additional information to offer regarding the potential location of a Pisgah Substation relocation?

PROJECT MANAGER MEYER: No, I do not.

(August 4, 2010 Tr., pp. 58-59; 81-82.)

Therefore, although Staff was required to analyze all of the transmission system upgrades necessary for the Project to operate. Staff did not. Consequently, Staff's assessment does not satisfy CEQA's requirement that the "whole of the project" be analyzed.

# A. THE TRANSMISSION UPGRADES WILL RESULT IN SIGNIFICANT AND UNMITIGATED IMPACTS TO BIOLOGICAL RESOURCES

Roughly 80% (4,720 acres) of the area in the Pisgah to Lugo SCE ROW is suitable habitat for desert tortoise and approximately 2,512.2 acres were classified as either good tortoise habitat or within designated critical habitat for desert tortoise. (Exh. 1(w).) Although, the Staff requested the Applicant provide complete surveys, these surveys were never done.

"Complete special-status species surveys for both plants and animals done when the organisms are identifiable (meaning multiple trips out, especially for plants); Delineation of waters of the U.S. and state; and Breakdown of temporary vs. permanent impact acreage in the various habitat types, with acreage for each habitat type." (Exh. 438.)

The applicant only conducted a reconnaissance-level habitat assessment to characterize the vegetation within the Pisgah-Lugo corridor and to determine potential habitats for sensitive species in 2007 and 2008. (Exh. 424, p. 17.)

The Pisgah-Lugo transmission corridor encompasses a wide range of terrain and elevation, and according to the Applicant, it crosses 17 native vegetation types (some of which are sensitive natural communities) and 3 non-native or disturbance-related vegetation types. (Exhibit 1(w).) The SA states the transmission corridor would cross through the Ord-Rodman Desert Wildlife Management Area ("DWMA"),

the Pisgah Area of Critical Environmental Concern ("ACEC"), and the Upper Johnson Valley Yucca Rings ACEC. (Exh. 300, p. C.2-121.) Information provided by the Applicant suggests the transmission line would also pass through the Juniper Flats ACEC. (Exhibit 1(w).)

Ten special-status plant and animal species were detected during the Applicant's reconnaissance-level surveys of the transmission corridor. (*Id.*) However, numerous other special-status species have the potential to occur along the route that were not articulated clearly in the SSA, nor did the SSA list all of the special-status species that might be affected by activities associated with the transmission line and substation upgrades. (Exh. 424, p. 17.)

According to the Applicant, listed species with a "moderate" or "high" potential of being affected by the transmission line and substations upgrades include: Mojave tarplant (State Endangered), California red-legged frog (Federally Threatened), desert tortoise (State and Federally Threatened), southwestern willow flycatcher (State and Federally Endangered), and Mohave ground squirrel (State Threatened). (Exh. 1(w).)

The SSA concludes the transmission line and substation upgrades could create significant impacts to biological resources due to the permanent loss of habitat and the disturbance to sensitive plant and wildlife species during construction. (Exh. 300, p. C.2-124.) However, the SSA further concludes mitigation is available and feasible, and would likely reduce most impacts to biological resources to less-than-significant levels under CEQA. (*Id.*) The SSA lacks support for the conclusion that mitigation is available and feasible for all potentially significant impacts, or that the proposed mitigation would likely reduce most impacts to biological resources to less than-significant levels. (Exh. 424, p. 18.)

The Upper Johnson Valley Yucca Rings ACEC contains a unique assemblage of ancient vegetation. Impacts to this feature would be significant and unmitigable. (*Id.*) White-margined beardtongue occurs along the transmission line route. This species has an extremely limited distribution in California, with most known occurrences in the immediate Project area. (*Id.*) The continued existence of white-margined beardtongue in California would be threatened by the Project. (*Id.*) Because the species is known to occur along the transmission line route, transmission upgrades required for the Project would exacerbate the threat, and might not be mitigable. (*Id.*)

The SA references "mitigation such as the measures described above" to justify its conclusion that mitigation to reduce impacts is available and feasible. The mitigation measures described "above" were originally recommended by the Applicant in Appendix EE to the AFC. (Exh. 1(w).) This is incorrect. The Staff has already demonstrated that some of these measures are actually infeasible. For

example, the Applicant proposed relocation for impacts to white margined beardtongue, which the SA explicitly states is infeasible as mitigation. (Exh. 424, p. 18.)

Therefore, the Staff has failed to undertake a meaningful analysis of the biological impacts that will occur as a result of the transmission upgrades necessary for the Project to operate. Although Staff knew early on that the transmission was a part of the 'whole of the Project' under CEQA, and requested the Applicant provide survey data for the transmission upgrades, Staff did not follow-through with the analysis, as required by CEQA. As a result, there are unanalyzed and unmitigable impacts associated with the Project that have not even been considered by Staff, not least of which will be additional significant impacts to desert tortoise.

The Commission cannot approve the Project until Staff completes its analysis of the Project's proposed transmission line.

## B. THE CULTURAL RESOURCE IMPACTS OF TRANSMISSION UPGRADES HAVE NOT BEEN ANALYZED

Staff asked that the Applicant provide pedestrian cultural resources survey of no less than 25 percent of the transmission line ROW and regulatory buffer zone, and appropriate additions to background sections to cover regions not covered in the original technical report. (Exh. 438.) However, the Applicant did not conduct a survey of this area for cultural resources. Staff concluded:

To date, no formal file and literature review and no intensive cultural resources inventory has taken place in the area of potential effect along the Lugo-Pisgah ROW. SCE would conduct cultural surveys as part of its CPCN application and PEA that will be submitted to the CPUC for the 850 MW Full Build-Out. *As such, the identification of affected cultural resources is limited to broad generalities* until such time that an intensive cultural resources inventory can be completed.

Thus, the scope of the impacts to cultural resources may change dramatically once the pedestrian survey is done. To permit this Project without knowing the magnitude of the cultural resources that will be affected by the Project improperly segments the analysis in violation of CEQA.

#### C. WATER SUPPLY

Transmission upgrades will require water for construction. Construction will result in a large amount of grading and earth moving activities, most likely requiring water for dust control. Although water is in short supply in the Mojave desert and the availability of water can determine the viability of most development, this significant impact was not considered by Staff.

#### D. SOIL RESOURCES

Another significant impact that was inadequately addressed by the Applicant and Staff in the SSA is the likelihood that roads needed for transmission upgrades will alter drainage patterns, vegetation patterns and habitats. (Exh. 405, p. 6.) Dr. Boris Poff, hydrologist for the Mojave National Preserve, noted that these roads will cross desert pavement, drainage features and mountain ranges, and result in significant impacts to the desert environment. (*Id.*) Impacts from the creation of new roads were not adequately addressed by Staff.

# X. THE WATER SUPPLY IS INADEQUATE, VIOLATES LORS AND WOULD RESULT IN UNANALYZED AND UNMITIGATED SIGNIFICANT IMPACTS

The Applicant proposed to rely on groundwater for all the Project's water needs. The Project will require approximately 150 AFY for construction and 20.4 AFY for operations. (Exh. 300, pp. C.7-39 and C.7-60.) Groundwater is the primary water source available in the site vicinity. (Exh. 300, p. C.7-17.) Groundwater occurrence and quality varies significantly within the Mojave Desert. (*Id.*)

CEQA requires the Commission's environmental review document to assume that all phases of the Project will eventually be built and will need water, and to analyze the impacts of providing water to the entire project. (*Vineyard Area Citizens for Responsible Growth v. City of Rancho Cordova* (2002) 40 Cal.4th 412.) If it is not possible to confidently determine that anticipated future water sources for a development project will be available, CEQA requires a discussion of replacement sources or alternatives to use of the anticipated water and the environmental consequences of those contingencies. *Id.* If it is not possible to confidently determine that backup water sources will be available, CEQA requires a discussion of other replacement sources or alternatives.

"[T]he future water supplies identified and analyzed must bear a likelihood of actually proving available; speculative sources and unrealistic allocations ('paper water') are insufficient bases for decisionmaking under CEQA." (*Id.* at p. 432.)

"The EIR must demonstrate that the significant environmental impacts of the proposed project were adequately investigated and discussed and it must permit the significant effects of the project to be considered in the full environmental context." (Cadiz Land Co., Inc. v. Rail Cycle, L.P. (2000), 83 Cal.App.4th 74, 92.) CEQA guidelines require "a sufficient degree of analysis to provide decisionmakers with information which enables them to make a decision which intelligently takes account of environmental consequences . . . [t]he courts have looked not for perfection but for adequacy, completeness, and a good faith effort at full disclosure." (County of Amador, supra, 76 Cal.App.4th at 954, quoting CEQA Guidelines § 15151; see also Berkeley Keep Jets Over the Bay Com. v. Bd. of Port Commrs. (2001) 91 Cal.App.4th 1344, 1367.) Only "where substantial evidence supports the approving agency's conclusion that mitigation measures will be effective, courts will uphold such measures against attacks based on their alleged inadequacy." (Sacramento Old City Assn. v. City Council (1991) 229 Cal.App.3d 1011, 1027 ("SOCA"), citing Laurel Heights Improvement Association v. Regents of the University of California (1988) 47 Cal.3d 376, 407.)

## A. WELL WATER IS NOT A DEMONSTRATED RELIABLE SUPPLY

The Commission cannot permit the Project until the Applicant identifies, and Staff analyzes in a report prior to evidentiary hearings, an adequate and reliable water supply to meet the Project's construction and operational requirements.

Staff reviewed the Applicant's proposed water sources in a water supply assessment. The Staff's water supply assessment makes it clear that Staff could not conclude that the Project had an adequate water supply:

"Staff concluded the project water supply is uncertain for the following reasons:

- 1. The 24-hour aquifer test conducted by the applicant provided limited information for long-term supply reliability. The pumping rate (100 gpm) was too low to induce sufficient drawdown and recovery, and the test time (24 hours) was too short to influence water levels in nearby wells or reveal potential boundary effects.
- 2. There appears to be significant spatial variability in well yield and water storage properties. The project applicant drilled three boreholes in the same general vicinity adjacent to the site. One boring was abandoned because the geophysical log indicated a low probability of significant permeable zones. A well was constructed in another boring at a slightly different location, but it is low-yielding (the yield is probably less than 10 gpm). The yield and efficiency of this well may

have been substantially compromised by a delay in well development, and it may be of limited value as a water supply. The third well, the proposed water supply well, produced 100 gpm for a 24-hour period without causing substantial drawdown. Because no active wells reportedly exist in the area, the long-term yield of this well is uncertain.

3. The project relies on well water for its potable supply and no firm, existing back-up or supplemental supply is identified. The project as planned is infeasible should the proposed water supply well fail to meet the water requirements of the project. A loss of water, especially the supply for potable and sanitary demands, is a significant negative impact." (Exh. 300 pp. C.7-44 and C.7-45.)

CURE's expert, Dr. Boris Poff, agreed with Staff's conclusions that the testing conducted by the Applicant was not adequate to determine whether a reliable water supply exists for the Project:

I agree with the Staff that there is significant uncertainty in the long-term reliability of the proposed water supply. The applicant states in Exhibit 56 that "...the aquifer penetrated by the well can support water demands for the Calico Solar site during construction and the lifespan of its operations, and pumping of the well at the prescribed rates will have no significant impact to water levels in the area." However, this statement is based on inadequate and insufficient testing and mere speculation. (Exh. 405, p. 6-7.)

Specifically, URS states that a) the boundary of the aquifer "basin to the east is not well documented; the mountains may only provide a partial groundwater barrier"; and b) "Because there are no records of other wells or borings drilled to this depth in the basin, the areal extent of the aquifer is not known." c) "Natural recharge into the basin is estimated to be about 300 afy and the storage capacity of the aquifer has been estimated to be approximately 270,000 acre-feet (af). (Exh. 56, p. 2-2.) However, little data exists to confirm these estimated values..." Thus, the SSA does not provide any estimates of the aquifer's storage capacity due to the lack of data. (Exh. 405, p. 6-7.)

In the Drawdown Analysis, URS qualifies its conclusion by stating that "the geology in the area appears to be variable and additional drawdown may occur as a result of long-term pumping effects." (Exh. 56, p. 5-4.) Further, URS believes that "it is likely that the aquifer penetrated by Well #3 is not confined." (*Id.*) While the rate at which Well #3 was tested (100 gpm - gallons per minute) was appropriate

since the peak rate of water extraction for the project would be 93 gpm (for five years) (93 gpm = 150 acre feet/year) and 100 gpm is within the suggested +/- 10 percent of the pump rate, the duration for the test should have been 72 hrs for an unconfined aquifer instead of 24 hrs. (Exh. 405.)

Thus, according to Dr. Boris Poff, the pump test for Well #1 (a step test up to 8 gpm instead of the expected Project usage of at least 93 gpm) was utterly inadequate for the project's water requirements. (Exh. 405.)

Based upon the information provided by the Applicant, Dr. Poff concluded that it would be irresponsible to consider Well #3 a reliable and primary water source for the Calico Solar project until additional monitoring wells on and offsite, in addition to adequate pump tests, could be shown to confirm the assumptions made by the Applicant. (*Id.*)

Further, although the Applicant did consider impacts to the zone of influence from potential groundwater drawdown as a result of Project pumping, the Applicant did so using inadequate and insufficient data. (*Id.*) Finally, the Applicant failed to look at impacts relating to long-term water availability in the region and the need for a back-up water supply. (*Id.*)

The analysis fails to include "facts [sufficient] to 'evaluate the pros and cons of supplying the amount of water that the [project] will need." (*Vineyard Area Citizens*, *supra*, 40 Cal.4th at p. 431.) Thus the Applicant failed to meet its burden to prove, on the basis of substantial evidence, that the Project has an assured and reliable water supply.

## B. PROJECT HAS NO VIABLE BACK UP WATER SUPPLY IN VIOLATION OF CALIFORNIA WATER CODE

Where a WSA indicates that current water supplies are insufficient, the lead agency must include in the CEQA document its plans for acquiring additional water supplies, setting forth the measures that are being undertaken to acquire and develop those water supplies. (Water Code, § 10911, subd. (a), (b).) The plans should include at least the following information:

- costs and financing;
- necessary governmental permits, approvals, and entitlements; and
- timeframe for completion.

The Applicant has not provided any information to show that the Project has a reliable back-up water supply. Although the Applicant stated during the evidentiary hearing that it would like water from the Cadiz basin to be considered

as a back-up water supply, it has not taken any steps to make that concrete or reliable. (Hearing Tr. 8/6/2010, p. 69.) The Applicant is in possession of no contracts or options for water from this basin. (*Id.* at p. 92). Moreover, Dr. Poff testified to the questionable reliability of future water from the Cadiz groundwater basin in general:

DR. POFF: There is no concrete evidence that Cadiz is an adequate alternative water supply source for this project because there's a good possibility that the groundwater extraction in Cadiz is also water mining operation, which means that the groundwater there eventually can be depleted within the project's life span (...) I believe currently the groundwater extraction at Cadiz is around 5,000 acre feet, and the USGS estimates that the recharge, however, is somewhere between 2- to 3,000 acre feet, and that the -- only those that have a financial stake in the groundwater extraction and those that they have hired have provided information with much higher recharge rates, which were most likely based on the geographic extent of the area rather than desert hydrology. Exact figures, I believe, were given in the original staff assessment on Water Table 2. The message here is that there's just a lot of uncertainty about the actual recharge, and therefore, reliability as a long-term water supply, Cadiz, I think, is questionable. (*Id.* at pp. 117-118.)

Thus, the Applicant has not provided substantial evidence of a reliable primary or back up water source in violation of the California Water Code and CEQA.

### C. PRIMARY WATER SUPPLY WELL IS NOT PERMITTED

The Applicant has proposed to rely upon a new well that has only been used for testing purposes. The Applicant referred to this as well #3. Well #3 is currently only permitted as a test well on private land adjacent to the Project site. However, any future pumping well would require a permit from San Bernardino County.

San Bernardino County regulates the operation of new wells through a permitting program that is determined after an analysis of what is a safe yield for the aquifer – none of which has been conducted for the proposed Project at this time:

"The protection of groundwater resources within San Bernardino County is of utmost importance. The public health, safety and general welfare of the people of the State of California and of the County depend upon the continued availability of groundwater through ensuring that extraction of groundwater does not exceed the safe yield of affected groundwater aquifers, considering both the short and long-term impacts of groundwater extraction, including the recovery of groundwater aquifers through natural as well as artificial recharge.

The protection of the groundwater resource within San Bernardino County also includes the consideration of the health of individual aquifers and the continued ability of those aquifers to store and maintain water. (San Bernardino County Municipal Code, Div. 3, Chap. 6, Art. 5 § 33.06551.)

Pursuant to these rules, before a new well can be permitted, the County requires the Applicant provide documentation of any of the following within a half mile of the proposed well: notable nearby geographic features (faults, etc.); all other wells; septic systems or other liquid or solid waste facilities; proposed well diameter, depth and completion interval (screen or perforation locations) for proposed well(s); anticipated groundwater safe yield of the affected groundwater aquifer; other information as may be reasonably necessary for the County to determine the potential effects of the proposed well operations on the groundwater safe yield and aquifer health of the affected aquifer.

The San Bernardino County Municipal Code prohibits any entity from operating any new groundwater well within the desert region of the County without first filing a written application to do so with the enforcement agency and receiving and retaining a valid discretionary permit in compliance with CEQA. (*Id.* at § 33.06554.) Environmental review would include an analysis of the well and any potential environmental impacts that will result if the well is operated.

The Applicant has not provided any evidence that it has a valid permit or has even begun the process of obtaining such a permit for the operation of this well under CEQA. The Commission cannot issue a finding that this water supply is consistent with the San Bernardino County Groundwater Ordinance until additional analysis is conducted of whether the water source complies with the various provisions of this ordinance.

Additionally, the water supply may be inconsistent with County General Plan Policies Regarding Water Supply. According to San Bernardino County Policy CI-11-12 of the 2007 County General Plan: "Prior to the approval of new development, adequate and reliable water supplies and conveyance systems must be available to support the development, consistent with coordination between land use planning and water supply planning."

As Staff concluded, the Applicant has not established that an adequate water supply is available for this Project. Moreover, the Applicant has not provided the Commission with documentation to show that the water is in compliance with the County groundwater regulations and the General Plan. The Commission cannot approve the Project until the Applicant provides substantial evidence of a reliable water supply.

# XI. STAFF HAS NOT IDENTIFIED, ANALYZED OR MITIGIATED SIGNFICANT IMPACTS TO CULTURAL RESOURCES IN VIOLATION OF CEQA

The Project area supports at least 119 archaeological sites and ten architectural resources. (Exh. 309, p. C.2-1.) These resources include artifacts that may provide evidence of the earliest peopling of America. (Exh. 441.) In fact, surveyors found a Lake Mohave spear point that is 8,000 - 11,000 years old within the Project's area of effect. (Site SBR-5600/H.) One of the oldest petroglyphs in America, dated before 12,000 years ago, is present in the Rodman Mountains, just west of the Project. (Exh. 441.) Early, and potentially very early, human use of the Project region, has been repeatedly demonstrated by archaeologists, and it is possible (if not highly likely) that the region contains important evidence that will provide information regarding the first peopling in the Americas. (*Id.*) Staff acknowledged the potential for the remains of a significant prehistoric landscape to be present on the Project site:

Energy Commission staff believes, contrary to the recommendations of the applicant, that the implementation of the proposed action would permanently destroy a large portion of a prehistoric archaeological landscape that may reasonably exist on the project site. The permanent loss of this landscape would be a significant impact requiring mitigation. (Exh. 309, p. C.2-96.)

Incredibly in their haste to permit this Project, BLM and the Applicant largely ignored the potential for significant prehistoric resources to exist on the Project site that would add to our knowledge of the earliest American history.

Solely on basis of a visual examination of the ground surface, the Applicant recommended and the BLM accepted, that only three archaeological sites and five built-environment properties within the project area are eligible for the National Register of Historic Places ("NRHP") and the California Register of Historical Resources ("CRHR"). (Exh. 309, pp. C.2-1, C.2-73.) These recommendations and determinations were made without Commission input or agreement. **Energy Commission Staff, by contrast, believes that the data on which the Applicant's and the BLM's conclusions are based are not adequate to definitively draw conclusions regarding resource eligibility.** (Exh. 309, p. C.2-1.)

At this point, Staff has not yet been able to identify the number of significant archaeological sites, districts and landscapes that have the potential to be eligible on the Project area. (*Id.*) Staff has just begun its analysis of the resources on this Project site. The Commission may not permit this Project prior to Staff's determinations of eligible resources on the Projects site, analysis of impacts to those

resources, and development of mitigation to avoid or minimize the impacts to these resources. If the Commission decides to permit this Project without conducting the analysis, it would be a clear violation of CEQA.

### A. THE BASELINE IS FLAWED AND THE PROJECT WILL RESULT IN SIGNIFICANT UNANALYZED AND UNMITIGATED IMPACTS

Energy Commission Staff have not agreed to the baseline determinations made by the Applicant and BLM because Staff does not believe the baseline data is adequate. As a result, Staff cannot make the required determinations of significance for the resources that would establish the environmental setting under CEQA upon which to evaluate impacts and identify mitigation measures. (Exh. 309, p. C.2-1.) Instead, Staff is proposing *to approve the Project and then conduct a study* that will evaluate a 20% sample of resources on the Project site. Every aspect of this process violates CEQA.

CEQA has two basic purposes, neither of which the Supplemental Staff Assessment ("SSA") satisfies. First, CEQA is designed to inform decision makers and the public about the significant environmental effects of a project before harm is done to the environment. (14 Cal. Code Regs. § 15002(a)(1); Berkeley Keep Jets Over the Bay v. Bd. of Port Comm'rs. (2001) 91 Cal.App.4th 1344, 1354 ("Berkeley Jets"); County of Inyo v. Yorty (1973) 32 Cal.App.3d 795, 810.)

Second, CEQA directs public agencies to avoid or reduce environmental damage by requiring imposition of mitigation measures and by requiring the consideration of project alternatives. (CEQA Guidelines § 15002(a)(2) and (3); Berkeley Jets, 91 Cal.App.4th 1344, 1354; Laurel Heights Improvement Ass'n v. Regents of the University of California (1988) 47 Cal.3d 376, 400.)

A central purpose of an EIR is to "identify ways that environmental damage can be avoided or significantly reduced." (CEQA Guidelines §15002(a)(2).) If the project has a significant effect on the environment, the agency may approve the project only upon finding that it has "eliminated or substantially lessened all significant effects on the environment where feasible," and that any unavoidable significant effects on the environment are "acceptable due to overriding concerns" specified in CEQA section 21081. (CEQA Guidelines § 15092(b)(2)(A)-(B).)

At the evidentiary hearing on August, 19, 2010, Commission Staff orally presented an entirely new mitigation strategy governed by an as yet unwritten Programmatic Agreement. Staff is having difficulty formulating this mitigation strategy because Staff has so little confidence in the Applicant's determinations of what resources are on the Project site. It is apparent that the Staff's analysis of the cultural resources on the Project site is in very early stages:

MR. MCGUIRT: one major point of contention [with BLM] is our CUL-4, which asked for a program to evaluate the historical significance of a lot of the archaeological resources in the project area. The purpose of that, ultimately *it's one step of several* steps that would lead us to a place to where we would be able to demonstrate under CEQA that we had fully taken into account whether or not there were historical resources in the project area and would be able to refine our mitigation to recover the information values for which these resources were significant. (Exh. 309, p. 418)

The Commission cannot approve the Project until Staff completes these required steps in a CEQA analysis, issues its analysis in a report pursuant to Commission regulations and subjects that analysis to cross examination in evidentiary hearings. (20 Cal. Code Regs. § 1742.5(b) and (c).)

## B. THE SSA'S FAILURE TO ESTABLISH AN ACCURATE ENVIRONMENTAL BASELINE PRECLUDES AN ADEQUATE ANALYSIS AND FORMULATION OF MITIGATION

Staff candidly concluded that additional analysis is required to determine the baseline information about cultural resources or site significance:

Staff believes that the presently available prehistoric archaeological site data reported by the applicant are too coarse in resolution to enable an adequate evaluation of the significance of these resources. Staff asserts that there is evidence to suggest that the data potential of the prehistoric resources within the project area of analysis has not necessarily been exhausted through recordation, as suggested by the applicant, and that additional investigation is warranted in order to more definitively draw conclusions regarding archaeological site significance. (Exh. 309, p. C.2-91.)

Staff's determination that additional investigation is needed was echoed by expert testimony from Dr. David Whitley. According to Dr. Whitley, additional analysis and testing is necessary in order to determine impacts and develop appropriate mitigation measures for each adverse impact that may exist on the Project site. (Exh. 441.) The types of mitigation that will be appropriate will vary depending upon the nature of the specific resource, and the significance values that are identified through the additional analysis and testing. (Exh. 441, pp. 3-4.) A prehistoric village containing a cemetery, for example, will likely be determined significant based both on its religious importance to Native Americans, and its potential to yield valuable scientific information about the past. A prehistoric tool-

making workshop, in contrast, may be identified as significant solely due to its potential to provide archaeological information. (Id.) These very different types of resources would require substantially different mitigation.

Staff agrees that the survey effort to date is *not adequate* to determine the types of resources present on the Project site:

Based on the information provided, staff believes that additional data potential may exist and subsurface testing of structured samples of the different archaeological sites would be warranted in order to draw more reliable conclusions regarding prehistoric archaeological site eligibility for at least the CRHR. (Exh. 309, p. C.2-94.)

What is compelling about the current project area in terms of substantiating staff's argument for some degree of site sampling is that: (1) a large number of formed artifacts were reported in the DPR forms for the sites in the project area; (2) being on public land, there is a high likelihood that unauthorized artifact collection (i.e., looting) has occurred in the project area (as reported in the Class III technical report), which may have skewed the surface visibility of lithic materials (particularly diagnostic artifacts) and correspondingly, any conclusions drawn about the sites based on surface observations alone; (3) the geology of the area is such that a sizable expanse of toolstone-quality material was available and actively exploited by prehistoric inhabitants over an apparently broad expanse of time, and the sites' constituents reflect the importance of lithic raw material procurement and initial treatment activities; and (4) while the project area of analysis was predominantly a lithic raw material procurement/assaying area, there is also evidence of other activities beyond primary lithic reduction (e.g., secondary/tertiary lithic reduction, late-stage bifacial tools, fire affected rock, and groundstone artifacts). The sites in the project area do not uniformly reflect basic toolstone procurement only, and it appears that other activities were also occurring there. Thus, given the size and quantity of the pavement quarry area, staff believes an attempt to more accurately characterize the technology and reduction organization through structured sampling of the sites prior to their permanent destruction by the project's construction is warranted. (Id. at p. C.2-95.)

As the Staff acknowledge, the Applicant's archaeological consultants have completed site inventories but not determinations of significance based on test

excavations. In other words, testing and therefore adequate determinations of significance for 106 of the 108 sites within the APE have not been completed, and no provisions or requirements have been suggested by the Staff to include this crucial step in the archaeological assessment of the Project. (*Id.*) This missing, yet essential, testing and analysis would provide affirmative information concerning the size, integrity and nature of each cultural resource.

Staff attempted to work around the lack of testing and analysis by including Condition of Certification CUL-4, which would require the Applicant to conduct testing and significance evaluations on a sample of the resources on the site *after Project approval*. (*Id*.)

In addition, staff would like to point out that it is common professional practice in cultural resource management to conduct at least some degree of subsurface sampling of archaeological sites that may be directly and permanently affected by a proposed project (even for sparse lithic scatters), particularly considering the broad expanse of land and degree of surface manifestations of archaeological remains reported by the applicant in the project area. *The lack of site testing, as in this case, is an exception to this common practice*. Furthermore, regardless of the presence of substantial subsurface deposits, professional research indicates that pavement quarries/toolstone procurement areas, such as that found in the Calico Solar project area, have been found to have research value in their own right. (Exh. 309, p. C-2-96.

Clearly, Staff has not yet determined the significant environmental effects of the Project. As a result, Staff also has not met CEQA's requirement to inform decision makers and the public about the Project's significant environmental effects. Finally, Staff cannot have developed mitigation to adequately avoid or reduce environmental damage or evaluated project alternatives because the baseline data simply hasn't been provided.

A central purpose of an EIR is to "identify ways that environmental damage can be avoided or significantly reduced." (CEQA Guidelines §15002(a)(2).) If the project has a significant effect on the environment, the agency may approve the project only upon finding that it has "eliminated or substantially lessened all significant effects on the environment where feasible," and that any unavoidable significant effects on the environment are "acceptable due to overriding concerns" specified in CEQA section 21081. (CEQA Guidelines § 15092(b)(2)(A)-(B).) CEQA requires the determination of the potential adverse impacts of a proposed project *prior to project approval*. The intent of this requirement is clear: base-line data on potential impacts are necessary to develop appropriate mitigation measures that will reduce the impact of a project to a less than significant level.

Staff's recommended Conditions of Certification subvert CEQA's requirement, effectively suggesting that the identification of the adverse impacts of the Project, through archaeological testing following Project approval, will mitigate these same adverse effects. (*Id.*) However, testing is not mitigation. In order to develop adequate mitigation for the Project's significant impacts to cultural resources, subsurface testing and analysis must be the first step of environmental review, not the last. Once the significance of the resource is determined, then appropriate mitigation can be formulated.

## C. BLM'S PROGRAMMATIC AGREEMENT IS NOT A LEGALLY VALID STRATEGY TO MITIGATE SIGNIFICANT IMPACTS UNDER CEQA

Although the SSA concluded that no Programmatic Agreement ("PA") would be used to mitigate impacts on the Project site, Staff appears to have changed its mind. During the evidentiary hearing on August 18, 2010, Staff proposed to develop a PA that would mitigate the impacts to resources on the Project site through the BLM's National Historic Preservation Act ("NHPA") section 106 consultation process. Since a PA has not been drafted, it appears that Staff intends to rely upon a PA that will be developed and implemented after Project approval. *This is wrong*.

In fact, CURE was assured by Staff that mitigation would be provided not in a PA but as conditions of certification:

CURE Comment 5: The SA indicates that all impacts to cultural resources will be mitigated through the preparation of a Programmatic Agreement (PA) pursuant to Section 106 of the National Historic Preservation Act (NHPA). The PA is an agreement that would be drafted prior to project approval that would defer the resolution of project impacts to after project approval. This is contrary to the statutory requirements of Section 106. If the PA is developed to mitigate significant impacts to cultural resources, the PA must fully consider the impact to cultural resources and propose mitigation for those impacts PRIOR to the issuance of any license for the project.

Staff Response: In lieu of the PA, staff has prepared Conditions of Certification that include mitigation measures to address significant impacts to cultural resources under CEQA.

Despite Staff's reassurance in the response to comments in the Supplemental Staff Assessment, Staff proposed to improperly defer development of mitigation to a PA that is developed after Project approval. There are four reasons why Staff must

analyze the Project's potentially significant impacts to cultural resources and develop appropriate mitigation now rather than after Project approval, as would be proposed in BLM's PA.

First, as lead agency under CEQA, the Commission must independently review and analyze a project's potential adverse environmental impacts and include its independent judgment in an environmental review document. (Pub. Res. Code § 21082.1(c); *Plastic Pipe and Fittings Assn. v. California Building Standards Comm'n* (2004) 124 Cal.App.4th 1390.) CEQA Guidelines specifically require a lead agency to subject information submitted by others to the lead agency's own review and analysis before using that information in an environmental review document. (14 Cal. Code Regs. § 15084(e).) Furthermore, when certifying an environmental review document, the lead agency must make a specific finding that the document reflects its independent judgment. (Pub. Res. Code § 21082.1(c).)

Second, the Commission's regulations require the Commission Staff to "present the results of its environmental assessments in a report" which "shall be written to inform interested persons and the commission of the environmental consequences of the proposal." (20 Cal. Code Regs. § 1742.5(b) and (c).) The regulations require "a complete consideration of significant environmental issues in the proceeding." (*Id.* at § 1742.5(d).) The Energy Commission's regulations also require the Commission to base its decisions only on evidence in its record. (*Id.* at § 1751(a).) As a result, the Commission cannot merely rely on an analysis of the significance of impacts or the efficacy of mitigation that will be conducted in the future by the BLM. It must make its own determination now based on evidence in its own record.

Third, site significance (and hence the potential for significant adverse impacts) is defined differently under CEQA than the NHPA. The identification and analysis of significant impacts is more stringent under CEQA than under the NHPA. Specifically, sites are significant under the NHPA if they are determined to be eligible for listing on the National Register of Historic Places ("NRHP"). (36 C.F.R. § 800.5.) NRHP eligible sites are also significant under CEQA. However, under CEQA, sites are also significant if they are listed in any historical registry. (14 Cal. Code Regs. § 15064.5(a).) Thus, the potential for significant adverse impacts, the need to design mitigation measures and the obligation to determine the effectiveness of mitigation is greater under CEQA. Unless the Commission conducts an independent analysis of significant impacts pursuant to CEQA, the Commission cannot "ensure a complete assessment of significant environmental issues," as required by the Commission's regulations. (20 Cal. Code Regs., § 1742.) Further, the Commission's decision will not be supported by substantial evidence in the record.

Finally, BLM's section 106 consultation process is not a substitute for Staff's CEQA analysis. CEQA and the Commission's own regulations require Staff to analyze the Project's impacts to cultural resources. Staff admittedly did not conduct the required analysis and did not provide a valid reason why it failed to do so.

Moreover, BLM's section 106 process is not an open process and does not meet CEQA's public disclosure requirements. In *Laurel Heights Improvement Assn. v. Regents of University of California* (1993) 6 Cal.4th 1112, the California Supreme Court explained the purposes and framework of the CEQA review process:

We have repeatedly recognized that the EIR is the 'heart of CEQA.' Its purpose is to inform the public and its responsible officials of the environmental consequences of their decisions before they are made. Thus, the EIR protects not only the environment but also informed self-government. To this end, public participation is an essential part of the CEQA process.

The Commission's environmental assessment document must serve to sound CEQA's 'alarm bell' whose purpose it is to alert the public and its responsible officials to environmental changes before they have reached the ecological points of no return... (County of Inyo v. Yorty (1973) 32 Cal.App.3d 795, 810.) "When the informational requirements of CEQA are not complied with, an agency has failed to proceed in 'a manner required by law." (Save Our Peninsula Committee v. Monterey County Bd. Of Supervisors (2001) 87 Cal.App.4th 99, 118.) If the deficiencies in an EIR-equivalent document preclude informed decision making and public participation, the goals of CEQA are thwarted and a prejudicial abuse of discretion has occurred. (Id. at p. 128.)

On the other hand, BLM, in consultation with other agencies, can determine who is allowed to participate in its processes of preparing a PA:

Certain individuals and organizations with a demonstrated interest in the undertaking may participate as consulting parties due to the nature of their legal or economic relation to the undertaking or affected properties, or their concern with the undertaking's effects on historic properties. (36 CFR § 800.2)

It is a bald violation of CEQA to defer the entire environmental review process – from the identification of the baseline environment to the evaluation of significant impacts to the formulation of mitigation measures – until after the Energy Commission approves the Project. Furthermore, to defer the identification of impacts and development of mitigation to a different BLM process where members of the public would have to apply and demonstrate an interest before they

would be allowed to participate, offends the fundamental public participation requirements woven throughout the fabric of CEQA.

## D. STAFF FAILED TO CONSIDER CEQA'S PROTECTION OF UNIQUE ARCHAEOLOGICAL RESOURCES

CEQA acknowledges the existence of both significant and "unique" archaeological sites and is intended to safeguard both categories of historical resources. (Pub. Res. Code § 21083.2.) Unique resources are defined as those that, beyond just contributing to general archaeological knowledge, have special and particular qualities, such as being the oldest of a particular site type, or that contain information that is needed to answer important scientific questions that are demonstrably of widespread public interest. (Exh. 441.)

One such archaeological topic is the first peopling of the Americas, and the antiquity of human occupation of North America. (*Id.*) This area has been investigated and debated by archaeologists for over a century and, unlike the vast majority of archaeological research problems, it is a question with wide public interest. (*Id.*)

Archaeologists have developed a number of competing theories about the peopling of the Americas and, while discoveries in the last two decades have improved our understanding of this topic, no consensus has yet been achieved on the ultimate question of when humans first arrived on the continent. (Id.) Three points are, however, certain: (1) the antiquity of human occupation in the Americas is still an unresolved archaeological problem; (2) new techniques, including new scientific dating techniques, are improving our ability to find a resolution to this long-standing issue; and (3) the central Mojave Desert archaeological record, including the immediate Project area, has played prominently, even if sometimes controversially, in the debate over this question. (Id.)

The controversial "Calico Early Man" site, for example, is a National Register of Historic Places site located near Yermo, just west of the Project, that some archaeologists continue to claim contains the earliest evidence for New World occupation. (*Id.*) The so-called "Manix Lake Lithic Industry," which occurs in the immediate region (and possibly within the Project APE), has been similarly cited as evidence for early Pleistocene (Ice Age) use of the desert. (*Id.*) Thus, the Project area has the potential to contain sites that may address this central issue in archaeological research, and this topic of primary public interest in prehistory. (*Id.*) Absent a reasonable effort to test the sites to determine whether they contain information that may be pertinent to this problem, the potential for identifying unique archaeological resources within the project's area of effect has been ignored. (*Id.*)

Staff completely overlooks this possibility in formulating its assessment of potentially significant Project impacts. (*Id.*) Staff's conditions are designed instead to accommodate Project approval without the prior identification of site significance values, adverse impacts, or the development of mitigation measures. According to Dr. David Whitley, Staff's proposed method of "after-the-fact" analysis poses a significant risk of allowing the destruction of archaeological sites that, if properly studied and treated, could represent internationally-significant heritage resources. (*Id.*)

In light of these circumstances, the Staff Assessment is inadequate because the baseline data needed to assess unique resources on the Project have not been provided. Staff's analysis does not accurately identify the potential adverse impacts that may result from the Project; nor can it thereby provide adequate Conditions of Certification for the Project that will reduce the impacts to archaeological resources to a less than significant level. (*Id.*)

The Commission must first, determine the baseline resources on the Project site; second, determine the Project's significant impacts to these resources; and third, develop mitigation to reduce significant impacts to these resources, where feasible. Without this analysis, the Commission will violate the fundamental principles of CEQA.

# XII. STAFF FAILED TO ESTABLISH THE BASELINE SOIL CONDITIONS ON THE PROJECT SITE AND THEREFORE FAILED TO IDENTIFY OR ANALYZE SIGNIFICANT OFFSITE IMPACTS

Project construction and operation will have long-term significant impacts on the Project site and off the Project site from the Project's impacts to desert soils. Desert pavement and cryptobiotic crusts are critical resources that stabilize the desert soil and prohibit fine particle transport in the winds and storm water flows from the Project site. (Exh. 405.) Staff failed to establish the extent of desert pavement and cryptobiotic crusts as part of the baseline environmental conditions on the Project site. (*Id.*) Because these important features were not surveyed or acknowledged, Staff did not adequately analyze or mitigate significant impacts to onsite and offsite resources.

The environmental setting, or baseline, refers to the conditions on the ground and is a starting point to measure whether a proposed project may cause a significant environmental impact. CEQA defines the "baseline" as the physical environment as it exists at the time CEQA review is commenced. (14 Cal. Code Reg. §15125(a); *Riverwatch v. County of San Diego* (1999) 76 Cal.App.4th 1428, 1453.) "An EIR must focus on impacts to the existing

environment, not hypothetical situations." (County of Amador v. El Dorado County Water Agency (1999) 76 Cal.App.4th 931, 952.)

If the description of the environmental setting of the project site and surrounding area is inaccurate, incomplete or misleading, the EIR does not comply with CEQA...Without accurate and complete information pertaining to the setting of the project and surrounding uses, it cannot be found that the FEIR adequately investigated and discussed the environmental impacts of the development project. (Cadiz Land Co., Inc. v. Rail Cycle, L.P. (2000) 83 Cal.App.4th 74, 87, quoting and citing San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus, (1994) 27 Cal.App.4th 713, 721-722, 729.)

Dr. Boris Poff, hydrogeologist for the Mojave National Preserve, explained that desert pavement and cryptobiotic crusts play an important role in the hydrology and sedimentation processes on the Project site. (Exh. 405, p. 3.) For example, disruption of crust and pavement during Project construction and operation will increase surface runoff and the rate of soil loss by an order of magnitude. (*Id.*) These increases in sediment laden runoff could significantly impact the morphology of the existing washes on and off the Project site. (*Id.*) Also, the disruption of the crust will substantially enhance wind erosion on the Project site. (*Id.*)



As in the proposed project area, the desert pavement itself consists of a thin layer of rocks which has captured sand and dust over the millennia. Once the top layer is removed the accumulated sand, clay and silt below the desert pavement is easily eroded away as shown in this photo. (Exh. 405, Figure 2.)

Dr. Poff explained that Staff's analysis is inadequate because data about cryptobiotic crusts and desert pavement was not included in the modeling of the Project's environmental impacts:

The applicant and Staff did not consider the water quality impacts of runoff laden with sediment from degraded desert pavement and cryptobiotic crust delivered downstream and offsite, as well as the potential for the increased sediments to be transported offsite by wind. The large-scale disturbance that is to occur on the geomorphic surfaces of the Project will lead to extensive new aeolian activity. Given the predominant southwestern wind direction, this will mean that a plume of sand, eroded from the disturbed area, will begin to extend from the southern edge of the Project.

(Exh. 405, pp. 4-5.) The potential for wind-driven impacts on the area immediately downwind of the Project is a significant impact that was not considered.

Because the Applicant did not provide an accurate description of the environmental setting, Staff did not analyze or mitigate these significant environmental impacts. Staff's assessment failed to satisfy CEQA's requirement that the baseline be determined as the *first* step in the environmental review process. Consequently, if the Commission approves the Project as proposed, the Commission will violate CEQA as a matter of law.

The Commission should require that the Applicant conduct surveys for the quantity, quality and type of desert pavement and cryptobiotic crust on the Project site and incorporate this baseline data into the analysis of the Project's impacts and formulation of mitigation. Until this analysis is completed, the Commission cannot approve the Project because significant environmental impacts to soil and water resources have not been analyzed or mitigated.

### XIII. COMMISSION CANNOT ISSUE OVERRIDES UNTIL THE ANALYSIS IS COMPLETED

The Commission cannot make a finding of overriding considerations unless and until each of the Project's significant impacts has been disclosed and analyzed, and until the Commission has required all feasible mitigation, including avoidance. (San Bernardino Valley Audubon Society, Inc. v. County of San Bernardino (1984) 155 Cal.App.3d 738; Woodward Park Homeowners Association, Inc. v. City of Fresno (2007) 160 Cal.App.4th 683.)

"There is a sort of grand design in CEQA: Projects which significantly affect the environment can go forward, but only after the elected decision makers have their noses rubbed in those environmental effects, and vote to go forward anyway." (Vedanta Society of So. California v. California Quartet, Ltd. (2000) 84 Cal.App.4th 517, 530 (emphasis in original).) An EIR that fails to adequately inform decision makers presents an unsound basis for a statement of overriding considerations and

exposes the lead agency to legal challenge under CEQA. (See San Bernardino Valley Audubon Society, Inc, supra, 155 Cal.App.3d 738 (statement invalidated for the same reasons that EIR was found invalid); Woodward Park Homeowners Association, Inc., supra, 160 Cal.App.4th 683.) As discussed above, in its haste to permit the Project, Staff completely failed to analyze the Project's significant impacts to a number of irreplaceable environmental resources such as desert tortoise, groundwater, ethnographic and buried cultural resources, and sensitive desert soils that take thousands of years to replace, among others. Consequently, Staff failed to adequately inform the Commission of the Project's significant environmental impacts. In other words, the Commission has not had "their noses rubbed in" the Project's environmental effects. Therefore, an override finding by the Commission would be premature at this point.

Further, a statement of overriding considerations cannot mislead the reader "about the relative magnitude of the impacts and benefits the agency has considered." (*Woodward Park Homeowners Association, Inc. v. City of Fresno* (2007) 160 Cal. App.4th 683, 718.) Because Staff failed to adequately analyze the Project's impacts, a statement of overriding considerations based on Staff's analysis would not fairly portray the Project's impacts. Because it would otherwise mislead the public, the Commission cannot proceed with an override finding until the Project's significant impacts are adequately disclosed and analyzed.

The Commission cannot go forward with an override of the Project's significant impacts until it has dealt with each and every significant impact. The Commission has not.

#### XIV. CONCLUSION

The Commission cannot approve the Project at this time. Until the Applicant provides baseline data and until Staff conducts additional analysis of baseline data, potentially significant impacts and mitigation, which is circulated for public review, the Commission cannot make the required findings under CEQA and the Warren-

Alquist Act. If the Commission approves the Project, as proposed and analyzed, the Commission will violate CEQA and the Warren-Alquist Act, including LORS.

Dated: August 23, 2010 Respectfully submitted,

\_\_\_\_/S/\_\_\_

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### Calico Solar – 08-AFC-13 DECLARATION OF SERVICE

I, Bonnie Heeley, declare that on August 23, 2010, I served and filed copies of the attached OPENING BRIEF OF CALIFORNIA UNIONS FOR RELIABLE ENERGY, dated August 23, 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/calicosolar/CalicoSolar\_POS.pdf. 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 electronically to all email addresses on the Proof of Service list; and by depositing in the U.S. mail at South San Francisco, CA, with first-class postage thereon fully prepaid and addressed as provided on the Proof of Service list to those addresses NOT marked "email preferred."

### **AND**

By sending an original paper copy and one electronic copy, mailed and emailed respectively to:

CALIFORNIA ENERGY COMMISSION Attn: Docket No. 08-AFC-13 1516 Ninth Street, MS 4 Sacramento, CA 95814-5512 docket@energy.state.us.ca.

I declare under penalty of perjury that the foregoing is true and correct. Executed at South San Francisco, CA, on August 23, 2010

\_\_\_\_\_/S/ Bonnie Heeley

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