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> California Energy Commission Attn Docket No. 09-AFC-8 1516 Ninth Street, MS-4 Sacramento, CA 95814-5512

> > Re: Genesis Solar Energy Project; 09-AFC-8

Dear Docket Clerk:

Enclosed are an original of and copy of First Opening Brief of California Unions for Reliable Energy.

Please docket the original, conform the copy and return the copy in the envelope provided.

Thank you for your assistance.

Sincerely,

/s/

Rachael E. Koss

REK:bh Enclosures

STATE OF CALIFORNIA California Energy Commission

In the Matter of:

The Application for Certification for the GENESIS SOLAR ENERGY PROJECT

Docket No. 09-AFC-8

FIRST OPENING BRIEF OF CALIFORNIA UNIONS FOR RELIABLE ENERGY

July 26, 2010

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I. INTRODUCTION

In its review and approval of the Genesis Solar Energy Project ("Project"), the Commission must fulfill the requirements of the Warren-Alquist Act and CEQA. The Warren-Alquist Act requires a finding that a project complies with all LORS. CEQA requires that all potential environmental impacts be analyzed and that all significant impacts be mitigated, including impacts from mitigation measures themselves. The proposed Project 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.

The Commission cannot approve the Project as proposed because there are significant unanalyzed and unmitigated impacts to biological resources and violations of LORS. In some instances, the RSA failed to meet the basic requirements of CEQA. For example, because the RSA failed to establish an accurate baseline for Couch's spadefoot toad, the RSA also failed to adequately analyze and mitigate the Project's significant impacts to spadefoot toads. The RSA also failed to show that proposed mitigation for the federal and State listed desert tortoise, as well as numerous other special-status species would be effective and feasible. Consequently, if the Commission approved the Project, the Commission would violate CEQA, the federal Endangered Species Act and the California Endangered Species Act. In addition, the RSA completely failed to analyze potentially significant impacts to biological resources from implementation of proposed mitigation including the creation of ephemeral ponds and the use of all-terrain fire engines.

The Project will also result in unanalyzed and unmitigated significant impacts from spills of heat transfer fluid ("HTF"), or Therminol VP-1, and violations of LORS related to hazardous materials and waste management. HTF is a hazardous material that poses acute and chronic health hazards. Exposure of HTF to people, wildlife and the environment may occur from spills measuring from hundreds to thousands of gallons and that may present HTF in a liquid or crystallized form. The RSA only analyzed HTF in its liquid form and only analyzed 750 cubic yards of soil contamination and handling as a consequence of a spill. Even that analysis failed to recognize that the Applicant's procedures result in placing hazardous waste in an unlined land treatment unit, which is prohibited by State law.

Finally, the Project will result in potentially significant impacts from the presence of unexploded ordnance ("UXO") on the Project site which have not been adequately analyzed or mitigated. If a UXO survey is not required for the Project, workers and the public will face significant safety risks.

It is the Commission's obligation to satisfy the requirements of the Warren-Alquist Act and CEQA. The RSA does not meet even the most basic requirements of CEQA. Further, the proposed Project violates federal and State law. The Commission cannot approve the Project.

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. (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.4th 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).) Staff's analysis must reflect the "independent judgment" of the Commission. (14 Cal. Code Regs. § 15084(e).) 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.4th 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.4th 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 mitigation.

III. BIOLOGICAL RESOURCES: THE BASELINE IS INACCURATE AND THE PROJECT WILL RESULT IN SIGNFICANT UNANALYZED AND UNMITIGATED IMPACTS AND VIOLATIONS OF LORS

The Project will impact approximately 1,800 acres of land that is habitat for numerous species including the desert tortoise, a species that is listed as threatened under the state and federal Endangered Species Acts. The Project area also provides habitat for golden eagle, a fully protected species, and Couch's spadefoot toad, a species of special concern. In addition, the Project contains Mojave fringe-toed lizard (species of special concern) habitat. Other species, including (among others) desert kit fox (fully protected species), American badger (species of special concern), northern harrier (species of special concern), loggerhead shrike (species of special concern), Le Conte's thrasher (state watch list), and California horned lark (state watch list), use the Project site. (Exh. 400, pp. C.2-34-46.) The Applicant proposes to destroy all of this habitat.

The Project's use of desert tortoise habitat, as well as the proposed relocation of tortoises living there, triggers the "incidental take" provisions of the California Endangered Species Act ("CESA"). "Take" means "hunt, pursue, catch, capture, or kill a protected species." (Fish and

Game Code § 86.) "Take" is only permitted if the take is incidental to otherwise lawful activities and the "impacts" are minimized and "fully mitigated." (*Id.*, § 2081(b).) Impacts of taking include "all impacts on the species that result from any act that would cause the proposed taking," including impacts to habitat. (*Id.*)

No incidental take permit may be issued if the issuance of the permit "would jeopardize the continued existence of the species." (*Id.*, § 2081(c).) The department is required to find that projects will not put species at risk of extinction 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.*)

The Federal Endangered Species Act ("FESA") also prohibits "take" of threatened and endangered species. (16 U.S.C. § 1538.) "Take" is defined as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct." (16 U.S.C. § 1532(19).) "Harm" includes "the destruction or adverse modification of habitat resulting in potential injury to a species, including injury from impairment of essential behavioral patterns, such as breeding, feeding or sheltering." (50 C.F.R. § 17.3.)

For species that do not have special protection under CESA or FESA, CEQA requires an agency to determine whether a Project will cause a significant impact because it will "substantially reduce the number or restrict the range of an endangered, rare, or threatened species." (14 Cal. Code Reg. §16065(a)(1).) 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. (Pub. Res. Code §§ 21083, 21065, 21065.3.) 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.) CEQA requires agencies to "avoid or minimize environmental damage where feasible." (14 Cal. Code. Reg. § 15021(a).)

A. The RSA's Failure to Establish an Accurate Environmental Baseline Precludes an Adequate Analysis and Formulation of Adequate Mitigation for Couch's Spadefoot Toad

1. The RSA Failed to Establish an Accurate Environmental Baseline

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.) "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.)

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, supra,* 76 Cal.App.4th at 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 Bd. of Supervisors* (2001) 87 Cal.App.4th 99, 125.)

The RSA's baseline method for Couch's spadefoot toads blatantly violates the requirements of CEQA. The RSA could not establish an accurate environmental setting for determining impacts to Couch's spadefoot toad "because the [Applicant's] surveys were not conducted during the appropriate season (i.e., after summer rains)." (Exh. 400, p. C.2-39.) Consequently, as Staff points out, "[w]ithout species-specific survey results and with limited occurrence information, it is difficult to assess the potential for indirect impacts to Couch's spadefoot toads". (Exh. 400, p. C.2-86.) Thus, as a Condition of Certification, the RSA requires surveys to identify potential spadefoot toad breeding habitat (i.e., to establish the baseline environmental setting). (Exh. 400, p. C.2-276.) The Applicant has indicated that surveys related to Couch's spadefoot toad have been scheduled for summer or early fall 2010. (Exh. 58, p. 17.) By deferring establishment of the baseline environmental setting for Couch's spadefoot toad until after Project approval, the RSA 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.

2. The RSA Failed to Adequately Analyze and Mitigate Significant Impacts

"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., supra*, 83

Cal.App.4th at p. 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.) Although the RSA attempted to analyze the impacts and formulate mitigation measures for Couch's spadefoot toad, this analysis may bear little resemblance to the analysis and mitigation that will be required after significant impacts to Couch's spadefoot toads are actually identified through an adequate survey effort.

By relying upon unsupported assumptions regarding presence or absence of Couch's spadefoot toad habitat, the RSA failed to adequately "investigate and discuss" the Project's environmental impacts to spadefoot toads that are actually present on the ground. Further, without the required information regarding baseline conditions, it is impossible to determine whether the analysis of project impacts to unsurveyed disturbance areas reflects the severity and significance of such impacts. Specifically, the RSA's assumptions may underestimate significant impacts to spadefoot toads. Consequently, the RSA's claimed effectiveness of proposed mitigation for the Couch's spadefoot toad is unsupported, unknown and unknowable.

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.) The RSA's conclusions regarding the effectiveness of mitigation measures in reducing impacts to Couch's spadefoot toads in unsurveyed areas are unsupported. Absent data indicating the presence or absence of Couch's spadefoot toad habitat, it is impossible for the Commission to determine whether proposed mitigation measures will be adequate to reduce impacts to less than significant levels.

Staff's conclusion is similar to a city's conclusions concerning mitigation measures that were supposed to address unidentified cumulative impacts to water supply struck down by the court in *Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692, 729-730 (*Kings County*). In that case, the EIR neither listed the projects considered in the cumulative impacts analysis nor provided information and analysis regarding these projects' cumulative impacts to water supply. Instead, the court observed, the EIR "merely assumes whatever impacts such projects may have will be mitigated by existing and planned water conservation efforts of governmental agencies in the area." (*Id.* at p. 729.) The court rejected this approach because:

Absent some data indicating the volume of ground water used by all such projects, it is impossible to evaluate whether the impacts associated with their use of ground water are significant and whether such impacts will indeed be mitigated by the water conservation efforts upon which the EIR relies.

(*Id.* at pp. 729-730.) Likewise here, without survey data showing the amount of Couch's spadefoot toad habitat present on the Project site, it is impossible to determine the extent of the

Project's impacts on Couch's spadefoot toad and whether such impacts will actually be mitigated by Staff's proposed mitigation.

Appropriately timed surveys for spadefoot toads have not been conducted. (Exh. 400, p. C.2-39.) Without reliable data, an accurate impact assessment cannot be conducted, and without an accurate impact assessment, the Commission cannot conclude that Staff's proposed mitigation to avoid impacts to spadefoot toad breeding ponds would reduce Project impacts to less than significant levels. This is reflected in the RSA's discussion of impacts associated with the Colorado River Substation expansion where Staff states,

Avoidance, minimization and compensation measures such as those described in staff's proposed Conditions of Certification BIO-19 *could potentially reduce* these impacts to less than significant levels. However, implementation of the avoidance measures described in these conditions of certification would *require site specific information* about the location of proposed project features in relation to sensitive plant species. Staff does not currently have the project-specific information and therefore *cannot address the feasibility of implementing effective avoidance measures as a means of reducing significant impacts*.

(Exh. 400, p. C.2-126, emphasis added.)

Further, the Commission's ability to make required findings depends upon an impact analysis that is based upon surveys and mitigation measures tailored to actual impacts. One of the three possible findings that a lead agency may make regarding an identified impact is "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).) Such a finding must be supported by substantial evidence in the record. (Pub. Res. Code § 21081.5; 14 Cal. Code Reg. § 15091(b).) "Substantial evidence" is "enough relevant information and reasonable inferences from this information that a fair argument can be made to support a conclusion, even though other conclusions might also be reached." (14 Cal. Code Reg. § 15384(a).) Where an agency's finding concerning the effectiveness of a mitigation measure is not supported by substantial evidence or defies common sense, courts have declined to defer to the agency's finding. (*Gray v. County of Madera* (2008) 167 Cal.App.4th 1099, 1117.)

In this case, the record does not contain substantial evidence that could support a finding "that changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the effect[s]" on Couch's spadefoot toad. Because the Commission does not have evidence of the severity and significance of these effects, it cannot find that, through implementation of the proposed mitigation measures, the effects would be avoided or substantially lessened. This is a violation of the Commission's most fundamental obligations under CEQA.

B. The RSA Failed to Demonstrate that the Proposed Compensatory Mitigation for Impacts to Special-Status Species and Their Habitat will be Feasible, Effective and Capable of Implementation

CEQA requires the Commission to formulate mitigation measures to address identified impacts that are defined, feasible, effective, and capable of implementation. (14 Cal. Code Reg. § 15126.4(a)(1)(B); Federation of Hillside and Canyon Associations v. City of Los Angeles (2000) 83 Cal.App.4th 1259, 1262.) The CESA and ESA also require formulating effective mitigation that can be implemented. Under CESA, the CDFG may issue an incidental take permit that authorizes "take" of specified endangered or threatened plants or animals during the course of an otherwise lawful activity, 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,

Each Federal agency shall, in consultation with and with the assistance of the Secretary [of Commerce or the Interior], 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).) Section 9 of the federal ESA prohibits "take" (e.g., harm, harassment, pursuit, injury, kill) of federally listed wildlife. "Harm" includes habitat modification or degradation that kills or injures listed wildlife. Take incidental to otherwise lawful activities can be authorized, after consultation with the U.S. Fish and Wildlife Service ("USFWS") under section 7. (ESA § 7(o)(2); 16 U.S.C. § 1536(o)(2).) The "Incidental Take Statement" issued by the USFWS specifies, among other things, those 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 RSA's proposed mitigation requiring the acquisition of approximately 1,800 acres of land in the Colorado Desert Recovery Unit to compensate for the loss of habitat for numerous special-status species including, among others, the desert tortoise (listed as threatened under both CESA and ESA), golden eagle, special-status and migratory birds, desert kit fox, American badger, and special-status bats, is infeasible, ineffective and incapable of implementation. 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 Mojave Desert area (Exh. 400, Biological Resources, Figure 2), it is simply unrealistic to expect that the Applicant will be able to acquire almost 2,000 acres of equivalent or better habitat to compensate for the destruction of habitat to numerous species that this Project will cause. For example, according to the RSA, over 200,000 acres of desert tortoise habitat would be lost to proposed future projects which will require compensatory mitigation. (Exh. 400, p. C.2-143.) Further, compensation land for the Project has not been identified. (July 12, 2010 Tr., p. 213.) There is **no** evidence in the record that this substantial amount of

privately-owned acreage of equivalent or better habitat function and value for all of the impacted species is available for purchase. In light of the current wave of renewable energy projects being proposed within the Colorado Desert Recovery Unit, it is questionable that this vast amount of suitable habitat acreage can be acquired.

Proposing mitigation that requires the acquisition of suitable habitat for several species 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 is a form of improper deferral of mitigation. (*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.)

The RSA's proposed compensation land scheme does not satisfy either of the above requirements. First, the proposal is unrealistic because it demands the availability of close to 2,000 acres of habitat for numerous species 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.

The compensation land proposal is also unrealistic and fails to ensure that significant impacts will be mitigated because Staff assumes, without any substantial evidence, that whatever land is acquired will contain suitable habitat for all of the impacted species. While Staff's conditions do call for suitable desert tortoise habitat, the conditions do not require that compensation lands provide suitable habitat for the many other species for which the compensation lands will allegedly provide mitigation. (Exh. 400, p. C.2-232.) When asked, for example, if the RSA requires that compensation lands be provided for roosting and foraging habitat for bats, Staff replied, "[t]here's no specific requirement" and Staff goes on to assume, without any support, that "the lands that are acquired will provide benefits to many other species in addition to desert tortoise." (July 12, 2010 Tr., p. 213.)

In fact, at the evidentiary hearing Staff admitted that "in a perfect world, all those things will integrate... The applicant will acquire land that has the adequate desert tortoise habitat, desert washes, and also provides suitable habitat for these species we're concerned about." (Id., p. 214, emphasis added.) "In a perfect world" many things could happen, like the Project could be built without causing any adverse effects to the environment. Unfortunately, this is not a perfect world – the Project will significantly impact numerous special-status species and Staff failed to provide substantial evidence that its proposal for the acquisition of lands will in fact mitigate those impacts. Thus, Staff's proposed conditions are unrealistic and fail to ensure the Project's significant impacts to several special-status species will be mitigated.

Further, Staff's proposal does not include a "no net loss" performance standard and does not include back-up provisions that would require alternative mitigation in the event habitat acquisition is not feasible. It also allows physical development to proceed before the Applicant has demonstrated that suitable habitat can be acquired as mitigation for Project impacts. (RSA, p. C.2-238.) Because there are numerous pending applications for immense solar thermal projects in the California Desert Conservation Area, and these proposed projects will also impact desert tortoise habitat, Staff must specifically address the feasibility of acquiring the desert tortoise compensatory habitat required to mitigate the impacts to numerous species caused by this Project. (Exh. 400, p. C.2-144.)

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).) Wishing does not make it so, and does not make it legal.

C. The RSA Failed to Analyze and Mitigate for Potentially Significant Impacts From the Whole of the Project

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., supra,* 47 Cal.3d at p. 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, themselves, cause significant environmental impacts, CEQA requires an evaluation of those secondary (indirect) impacts. (14 Cal. Code Reg. § 15064(d).) The RSA failed to analyze significant impacts from proposed mitigation measures and therefore failed to analyze and mitigate for potentially significant impacts from the whole of the Project.

1. The RSA Failed to Analyze Potentially Significant Impacts to Biological Resources from the Creation of Couch's Spadefoot Toad Breeding Habitats

To mitigate for significant impacts to Couch's spadefoot toad, the RSA proposes creating "additional breeding habitats (ephemeral pond)." (Exh. 400, p. C.2-277.) Staff acknowledged at the evidentiary hearing that biological resources would be impacted by the creation of ephemeral ponds:

Ms. Koss: What biological resources would be impacted by pond construction?

Dr. Sanders: Well, anything.

(July 12, 2010 Tr., p. 209.) Despite Staff's admission that creating ponds would impact biological resources, the record contains *no analysis* of potentially significant impacts form the creation of ponds. Rather, Staff assumes that an analysis will be conducted in the future. According to Staff, "And you would need to assess – before you just dug, you'd need to assess potential impacts to sensitive resources potentially at the ponds." (*Id.*) Staff's failure to analyze

potentially significant impacts from creating ephemeral ponds blatantly violates CEQA's requirement that all potentially significant impacts be analyzed. Consequently, if the Commission permits the Project as proposed, the Commission would violate CEQA as a matter of law.

2. The RSA Failed to Analyze Potentially Significant Impacts to Biological Resources from the Use of All-Terrain Fire Engines

Condition of Certification Worker Safety-6 requires the Applicant to provide two all-terrain fire engines for emergency personnel to enter the site in the event the access to the plant is unavailable. (Exh. 433.) According to the Applicant, these fire engines would be in the possession of the Riverside Fire County Department and would not be housed on the Project site. (July 12, 2010 Tr., p. 404.) Thus, in the event of an emergency where the main access to the Project is blocked, the all-terrain fire engines would have to access the site via other points. To date there are no routes planned for alternative access for the fire engines. (*Id.*, pp. 410-411.) However, the Applicant relayed that "the fire department told us that they could actually drive over or through anything that they so chose to do." (*Id.*, p. 405.)

Despite the fact that all-terrain fire engines may "drive over or through anything that they so chose to," the record contains *no analysis* of potentially significant impacts to biological resources from fire engines driving through habitat for numerous species. Staff's failure to analyze potentially significant impacts from the all-terrain fire engines blatantly violates CEQA's requirement to analyze all potentially significant impacts. Therefore, if the Commission approves the Project as proposed, the Commission will violate CEQA as a matter of law.

IV. HAZARDOUS MATERIALS AND WASTE MANAGEMENT: THE PROJECT WILL RESULT IN UNANALYZED AND UNMITIGATED SIGNIFICANT IMPACTS FROM HTF SPILLS AND VIOLATIONS OF LORS

The Project will result in unanalyzed and unmitigated significant impacts from spills of heat transfer fluid ("HTF"), or Therminol VP-1, and violations of LORS related to hazardous materials and waste management.

The Project will circulate approximately 4 million gallons of HTF through a piping system to generate high pressure steam. (Exh. 400, p. C.13-14.) HTF is a mixture of 73.5% diphenyl ether and 26.5% biphenyl. (Exh. 400, p. C.4-8.) HTF is regulated as a hazardous material by the State due to the constituent biphenyl, an "extremely hazardous waste." (Exh. 400, p. C.13-14; 22 Cal. Code Reg., Chap 11, App. X, #299.) The listing of a chemical in Appendix X creates a regulatory presumption that a waste containing that chemical, i.e. HTF contaminated soil, is hazardous unless determined otherwise, pursuant to specified procedures. (Exh. 400, p. C.13-14.)

The materials safety data sheet for Therminol VP-1 states that biphenyl is a hazardous chemical that causes health effects from chronic exposure, including:

• headache, fatigue, nausea, indigestion, abdominal pain, tremor, central and peripheral nerve damage and liver injury.

(Exh. 1, Appendix H, Appendix A.) HTF is highly flammable and fires have occurred at other solar generating stations that use it. (Exh. 400, p. C.4-8.) "The components of HTF are reported to biodegrade relatively rapidly in the environment, have slight toxicity to tested terrestrial species, higher toxicity to tested aquatic species, and a potential to bio-accumulate." (Exh. 1, Appendix H, p. 21.) Therefore, spills of HTF may result in significant impacts to humans, wildlife and the environment.

A. The Project Will Result in Unanalyzed and Unmitigated Significant Adverse Impacts From HTF Spills

As a preliminary matter, the RSA is inconsistent regarding the amount of HTF that would be used by the Project. In the Hazardous Materials section, Staff analyzed 2 million gallons of HTF "contained in the pipes and heat exchanger." (Exh. 400, p. C.4-8.) In the Waste Management section, however, Staff stated that approximately 4 million gallons (2 million gallons within each of the Project's two units) of HTF will be utilized at any one time "in the piping and necessary expansion tanks." (Exh. 400, p. C13-14.) According to the RSA, "no other HTF would be stored on site." (*Id.*) Since the record shows that each of the Project's two units will contain 2 million gallons of HTF, potentially significant impacts associated with 4 million gallons of HTF should have been analyzed in both the Hazardous Materials and Waste Management sections of the RSA.

The RSA failed to evaluate reasonably foreseeable potentially significant impacts from HTF spills and failed to evaluate several other potentially significant impacts from HTF spills, including those related to spills and subsequent handling and Project activities related to free-standing HTF and benzene, an HTF degradation product. Potential spills of HTF may be much larger and different in composition than potential spills that were analyzed in the RSA, resulting in significant unmitigated impacts both on-site and off-site to people, wildlife, and the environment from potential and likely exposure to toxic levels of contamination.

1. The RSA Failed to Analyze Significant Impacts From Reasonably Foreseeable HTF Spills

The RSA limited its evaluation of impacts to the annual treatment of an estimated 750 cubic yards of HTF-contaminated soil at the Project's Land Treatment Unit ("LTU"). (Exh. 400, pp. C.13-14-15.) The RSA's analysis was specifically based on similar facilities operated by the Applicant – the SEGS facilities – for its assumptions. (Exh. 400, pp. C.4-8, C.13-14.) However, HTF spills at the SEGS facilities operated by the Applicant have been on the order of thousands of gallons of HTF and thousands of cubic yards of HTF-contaminated soil. (Exh. 517, p. 1; Exh. 520.) For example, a July 27, 2007 *HTF spill of 30,000 gallons* (more than the capacity of a backyard swimming pool) *generated 6,558 cubic yards* of HTF-contaminated soil. (Exh. 517, p. 2; Exh. 520.) It follows that it would only require a spill of 3,430 gallons to create the 750 cubic yards of contaminated soil that Staff analyzed. Given the substantial evidence showing just one HTF spill could generate almost ten times the amount of contaminated soil analyzed in the RSA,

there is no valid basis for limiting the assessment of potential impacts from undisclosed-sized spills that result in 750 cubic yards of contaminated soil per year. Furthermore, the Applicant could not provide any support for its assumption that HTF spills would result in 750 cubic yards of contaminated soil per year. (July 12, 2010 Tr., p. 338.) Potentially significant impacts from reasonably foreseeable spills have not been analyzed.

2. The RSA Failed to Analyze and Adequately Mitigate Significant Impacts From Free-Standing HTF

Staff failed to analyze potentially significant impacts associated with free-standing HTF. Staff's analysis stated that "Therminol can be expected to remain liquid if a spill occurs." (Exh. 400, p. C.4-8.) However, the RSA conceded that HTF may not remain liquid when spilled. The RSA stated that at temperatures below 54 degrees, HTF crystallizes. (Exh. 400, p. C.9-54.) The Applicant stated that after an HTF spill occurs, HTF would "start to cool immediately." (July 12, 2010 Tr., p. 347.)

CURE's consultant independently investigated HTF in order to evaluate potentially significant impacts, feasible mitigation and compliance with LORS. Public records show that massive volumes of spilled HTF may be recovered from the ground surface and recycled. (Exh. 520.) In addition, at the evidentiary hearing, the Applicant stated that free-standing HTF would be recycled. (*Id.*, p. 346.) "At the SEGS facilities, when spilled, the HTF forms wax-like piles of free standing liquids on the ground surface. The piles are scooped up or are vacuumed in cleanup efforts documented at the SEGS facilities." (Exh. 517, p. 3.) In some instances, these piles may remain on the soil for days. For example, after a 1,000-gallon HTF spill occurred at a SEGS facility on February 27, 2007, HTF-contaminated "soil removal was temporarily suspended on 28 February due to high winds." (Exh. 520.)

Staff admittedly did not analyze significant impacts from free-standing HTF. (July 12, 2010 Tr., p. 363.) Instead, the RSA analyzed HTF spills only as liquid. Staff's analysis states that "Therminol can be expected to remain liquid if a spill occurs." (Exh. 400, p. C.4-8.) "HTF spills typically spread laterally on the bare ground and soak down to a relatively shallow depth. The contaminated soil is regulated as a hazardous material." (Exh. 400, p. C.13-14.) This analysis fails to describe any process related to free-standing or crystallized HTF and, thus, fails to consider significant impacts from HTF that is different in composition than liquid HTF.

Because the RSA failed to analyze potentially significant impacts from free-standing HTF, the RSA lacks mitigation for impacts that may occur. Spilled HTF at the Project will require a response that was not described or analyzed in the RSA. The RSA failed to include any provisions for the Project's handling of free-standing HTF atop the ground surface. (July 12, 2010 Tr., p. 363.) The RSA contains no description of the potential volume of crystallized HTF that may be generated, no description of the duration of HTF exposure in the environment, and no description of the process for handling the substance. Instead, the RSA only considered the need to annually treat an estimated 750 cubic yards of contaminated soil at the Land Treatment Unit ("LTU") that would result from spilled HTF. (Exh. 400, pp. C.13-14-15.)

Similarly, the Project documents, including the Report of Waste Discharge, did not describe or include provisions for handling spilled free-standing HTF. (Exh. 1, Appendix H.) The Project Applicant provided no design specifications for, much less an explanation of, treatment technologies for free-standing HTF.

HTF spills may result in potentially significant impacts and require clear procedures and mitigation for on-site clean-up and/or recycling or that may occur as part of the Project but has never been described or analyzed. Thus, the RSA failed to inform the public and the decisionmakers about the Project and its potential impacts and fails to mitigate those impacts.

3. The RSA Failed to Analyze and Adequately Mitigate Significant Impacts From Benzene as an HTF Degradation Product

The RSA identified benzene as a degradation product of Therminol VP-1. (Exh. 400, p. C.5-13.) Benzene is a known, human carcinogen. (Exh. 517, p. 4.) Benzene moves rapidly through the soil and would potentially contaminate groundwater. (Exh. 517, p. 5.) However, Staff admittedly did not analyze potentially significant impacts to workers, the public or the environment from benzene in soil and groundwater. (July 12, 2010 Tr., pp. 367-368.) And alarmingly, at the evidentiary hearing, Staff stated that it was "not an HTF expert" and had "limited knowledge" of benzene. (July 12, 2010 Tr., p. 359.) Indeed, Staff knows very little about benzene. When asked how quickly benzene would volatilize, Staff replied, "[b]enzene is going to be one of the more volatile components of the breakdown products. So it will volatilize very quickly." (July 12, 2010 Tr., p. 365-366.) In fact, benzene has relatively low volatility. (Exh. 400, Soil & Water Resources, Appendix B, p. 16.)

CURE's expert provided substantial evidence that, when HTF is spilled, workers, the public and the environment may be exposed to benzene, a known potent carcinogen. First, workers may be exposed to benzene in soil as they tend to HTF spills and contaminated soils in the LTU. (Exh. 517, p. 4.) The RSA failed to analyze this significant impact. (July 12, 2010 Tr., pp. 367-368.) Moreover, the RSA's worker safety conditions of certification do not provide specific provisions to protect workers from benzene. (Exh. 517, p. 4.)

Second, benzene is highly mobile in soil and does not typically adsorb to soil. (Exh. 517, p. 5.) Consequently, releases of benzene from the degradation of spilled HTF would potentially move to groundwater. (*Id.*) Groundwater provides the only water resource in the Chuckwalla Valley. (Exh. 400, p. C.9-22.) Designated and beneficial uses of groundwater in the basin include domestic, municipal, agricultural and industrial use. (*Id.*) Thus, benzene could significantly impact the designated beneficial uses of groundwater. The RSA failed to analyze benzene as a groundwater contaminant. (July 12, 2010 Tr., pp. 367-368.)

Staff completely failed to analyze potentially significant impacts to workers, the public and the environment from the presence of benzene in soil and groundwater. In fact, when asked whether benzene in soil or groundwater was analyzed in the RSA, Hazardous Materials Staff stated, "[n]ot in the Public Health or Haz Mat Section. And I think you understand the reason why. Because once it hits the ground, it's a waste and it has to be dealt with in the Waste Management section." (July 12, 2010 Tr., p. 367.) Yet, when Waste Management Staff was

asked if he analyzed benzene in soil and groundwater, he stated, "I did not." (July 12, 2010 Tr., pp. 367-368.) The RSA failed to adequately analyze potentially significant impacts to workers, the public and the environment from HTF spills. Thus, the Commission cannot find that all impacts from HTF spills have been analyzed and mitigated based on this record.

In addition, the mitigation proposed for significant impacts associated with HTF-contaminated soil does not address benzene. The RSA identifies EPA Method 8015 as the test method to be used to analyze HTF-contaminated soil. (Exh. 400, p. C.13-30.) However, in the Abengoa proceeding, the Lahontan RWQCB required analysis using EPA Method 1625B for HTF and Method 8260 for benzene. (Exh. 517, p. 4.) Thus, the RSA should require EPA Method 8260 for soil testing for benzene.

Benzene is known to move rapidly through the soil. The Report of Waste Discharge ("ROWD") states that soil samples will collected at a depth of one foot below the compacted soil base at the LTU. (Exh. 1, Appendix H, p. 8.) The samples will be analyzed using EPA Method 8015 to determine whether HTF is migrating below the 5-foot treatment zone underlying the unit. (*Id.*) If concentrations above the laboratory detection limit are found below the 5-foot treatment zone, the Applicant must report the release. (*Id.*) However, EPA Method 8015 is not the appropriate method to test for the presence of benzene. (Exh. 517, p. 4.) Rather, EPA Method 8260 must be used to monitor for benzene, a degradation product of HTF that is known to rapidly move through soil. (Exh. 517, p. 5.)

Furthermore, because benzene does not typically adsorb to soil, releases of benzene would potentially move to groundwater. (*Id.*) The ROWD states that groundwater samples will be analyzed for biphenyl and diphenyl oxide, but does not provide for benzene testing. (Exh. 1, App. H, Table 1.) The RSA should require groundwater monitoring for benzene.

Potentially significant impacts to soil and groundwater from benzene as a degradation product of spilled HTF has never been described or analyzed. Thus, the RSA failed to inform the public and the decisionmakers about the Project and its potential impacts and fails to mitigate those impacts.

B. The RSA's Mitigation Measures for HTF Spills Do Not Mitigate Significant Impacts and Violate LORS

1. Hazardous Materials Conditions Fail to Mitigate Significant Impacts

The RSA requires that the Applicant prepare various plans for the handling of hazardous materials, including a spill prevention control and countermeasures plan, an operation of waste management plan, a hazardous materials management plan and a health and safety plan. (Exh. 400, pp. C.4-20-21.) However, the RSA does not require that those plans address reasonably foreseeable spills of HTF similar to those at the SEGS facilities (e.g., a 30,000-gallon spill). When asked what HTF spill volume will be addressed by these plans, the Applicant could not provide a volume. (July 12, 2010 Tr., p. 338.) Thus, Hazardous Materials Conditions of Certification fail to mitigate the reasonably foreseeable potential impacts from spills.

Further, according to Haz-4, the project owner shall place an adequate number of isolation valves in the HTF pipe system so as to be able to isolate a solar panel loop in the event of a leak. (Exh. 400, p. C.4-20.) There is no evidence that this measure addresses significant impacts. First, in the Hazardous Materials section, Staff incorrectly analyzed 2 million gallons of HTF used by the Project, even though approximately 4 million gallons of HTF will be utilized at any one time. (Exh. 400, pp. C.4-8, 4.13-14.) Second, although Staff testified that the "isolation valve" measure "would not allow fewer isolation valves than could allow more than 1,250 gallons of heat transfer fluid to leak out from any continuous loop system," Staff failed to provide the maximum spill volume for the entire Project. Obviously, the Project contains more than one loop. (Exh. 1, p. 3-21.) Furthermore, there are numerous other components of the HTF system from which HTF may leak including the HTF heater, the HTF expansion tanks, the HTF ullage/flash system, and HTF piping headers. (Exh. 1, p. 3-6.) Thus, the record provides no evidence that installing additional isolation valves mitigates significant impacts from HTF spills.

2. Waste Management Conditions Fail to Mitigate Significant Impacts and Violate LORS

The handling of HTF contaminated soil in the RSA and Condition of Certification Waste-10 fail to mitigate significant impacts from HTF spills and violate LORS. Like the Hazardous Waste conditions, the measures reveal how little Staff understood about HTF use in the Project and potential impacts from HTF spills.

Section 25203 of the Health and Safety Code prohibits any person from disposing of a hazardous waste except at a hazardous waste facility. "Disposal" means either of the following:

- (1) The discharge, deposit, injection, dumping, spilling, leaking, or placing of any waste so that the waste or any constituent of the waste is or may be emitted into the air or discharged into or on any land or waters, including groundwaters, or may otherwise enter the environment.
- (2) The abandonment of any waste.

(Health and Safety Code §25113(a).) If a leak occurs, section 25123.3 of the California Health and Safety Code sets forth the requirements for temporarily staging waste. Temporary waste staging is appropriate for hazardous waste only if, among other critera:

- The hazardous waste being accumulated does not contain free liquids; and
- The hazardous waste is accumulated on an impermeable surface, such as high density polyethylene (HDPE) of at least 20 mills that is supported by a foundation, or high density polyethylene of at least 60 mills that is not supported by a foundation, among other requirements.

(Health and Safety Code § 25123.3(a)(2), (b).) If any of the requirements are not met, then the Project must be regulated as a hazardous waste storage facility under Health and Safety Code Section 25200 et seq.

The staging area of the Project's LTU does *not* meet the requirements for a temporary staging area under Section 25123.3(a)(2) of the Health and Safety Code. Specifically, the hazardous waste being accumulated (1) contains free liquids, and (2) is not "accumulated on an impermeable surface, such as high density polyethylene (HDPE) of at least 20 mills that is supported by a foundation, or high density polyethylene of at least 60 mills that is not supported by a foundation."

According to the record, spills of HTF "will be moved to a staging area in the LTU where it will be placed on plastic sheeting pending receipt of analytical results and characterization of the waste material" (Exh. 1, Appendix H, p. 21.) Condition of Certification Waste-10 states:

The project owner shall submit to the CPM and DTSC for approval an assessment of whether the HTF contaminated soil is considered hazardous or non-hazardous under state regulations. HTF-contaminated soil that exceeds the hazardous waste levels must be disposed of in accordance with California Health and Safety Code (HSC) Section 25203. HTF contaminated soil that does not exceed the hazardous waste levels may be discharged into the land treatment unit (LTU). For discharges into the LTU, the project owner shall comply with the Waste Discharge Requirements contained in the Soil & Water Resources section of this document.

(Exh. 400, p. C.13-20.)

Waste-10 contains inconsistent directives and permits the Applicant to stage large volumes of contaminated soil in violation of Section 25123.3 of the California Health and Safety Code. According to Waste-10, for discharges into the LTU, the project owner shall comply with the Waste Discharge Requirements contained within the Soil & Water Resources section of the RSA. (*Id.*) The Soil & Water Resources section states:

A staging area is located **in the LTU** for storage of HTF-impacted soils while they are being characterized. Soil characterized as hazardous will be removed from the site; therefore, no additional liner system is required in the LTU to cater for the hazardous waste.

Spills of HTF will be cleaned up within 48 hours and affected soil will be moved to a staging area **in the LTU** where it will be placed on plastic sheeting pending receipt of analytical results and characterization of the waste material.

If the soil is characterized as a hazardous waste, the impacted soils will be transported from the site by a licensed hazardous waste hauler for disposal at a licensed hazardous waste landfill.

(Exh. 400, Soil & Water, Apendix B, pp. 15-16.) At the evidentiary hearing, the Applicant confirmed that the staging area "is an integral part of" the LTU. (July 12, 2010 Tr., p. 342.) This is alarming considering that the HTF spill that occurred at SEGS in 2007 resulted in 6,408 cubic yards of contaminated soil that, after being temporarily stored onsite, had to be transported offsite to an approved disposal facility. (Exh. 520.)

The procedure of removing contaminated soils and temporarily staging the soils in the LTU violates LORS. Spills of HTF will generate free liquids at temperatures above approximately 54 degrees Fahrenheit. (Exh. 400, p. C.4-8; Exh. 517, p. 7.) The RSA states that "Therminol can therefore be expected to remain liquid if a spill occurs." (*Id.*) Since the hazardous waste being accumulated contains free liquid, the LTU does not comply with the requirements for temporary waste staging. (Health and Safety Code § 25123.3(a)(2).)

Additionally, "[t]he LTU will not incorporate a liner containment system or LCRS, but will be constructed with a prepared base consisting of 2 feet of compacted, low permeability, lime-treated material." (Exh. 400, Soil & Water, Appendix B, p. 15.) Since the hazardous waste is not being accumulated on an impermeable surface, the LTU does not comply with the requirements for temporary waste staging. (Health and Safety Code § 25123.3(a)(2).)

As conditioned, the RSA allows HTF contaminated soils to be placed in the LTU without testing and later found to exceed hazardous waste levels, thereby resulting in improper staging of hazardous waste. This violates California hazardous waste regulations.

V. HAZARDOUS MATERIALS AND WASTE MANAGEMENT: THE PROJECT WILL RESULT IN UNANALYZED AND UNMITIGATED SIGNIFICANT IMPACTS FROM UNEXPLODED ORDNANCE

Substantial evidence shows the potential for UXO on the Project site. However, the RSA fails to adequately analyze and mitigate potentially significant impacts to the public and workers from the presence of UXO.

The RSA's complete analysis of potentially significant impacts from the presence of UXO on the Project site is as follows:

the project area was within General Patton's World War II (WWII) Desert Training Center, California-Arizona Maneuver Area region (1942-1944). The region surrounding the Project Area was considered a suitable location for training troops that would be deployed in the North Africa Campaign. After 2 years in operation and the training of one million troops, the desert training camps were closed in 1944. Military trash scatter including ration containers, military-issue utensils, and one 50-caliber cartridge were identified during the Tetra Teach site visits. (GSEP 2009a, Appendix E). There is potential for unexploded ordnance (UXO) at the project site.

(Exh. 400, p. C.13-12.) The RSA's limited analysis fails to capture the extent of military maneuvers conducted in the Project vicinity.

The Phase I Environmental Site Assessment ("ESA") conducted for the Project recommended a UXO survey, stating, "[d]ue to the use of the Subject Property for military maneuvers, the potential exists for the presence of UXO. Prior to construction, it may be a prudent safety measure to conduct a stand-alone UXO screening of the Subject property." (Exh. 1, Appendix F, p. 6-1.) CURE submitted evidence that the Project area is located in the vicinity

of an area identified as a "gunnery range" on a map of the Desert Training Center/California Maneuver Area ("CAMA"). (Exh. 521; Exh. 522.) CURE also submitted evidence that several military exercises, with an emphasis on small unit training, were conducted in Chuckwalla Valley. (Exh. 517, p. 9.) A WWII-era map of the CAMA shows that the Headquarters of the Army Ground Forces was located approximately 8 miles west of the Project. (*Id.*; Exh. 521; Exh. 522.) During field maneuvers, divisions defended positions opposing forces by placing numerous obstructions, including minefields. (Exh. 517, p. 9.) Palen Pass, located approximately two miles north of the Project site, was the site of the largest maneuvers during the CAMA period. (*Id.*) Fortifications were constructed throughout the area of Palen Pass and bomb craters and cartridge cases can still be found in the area. (*Id.*)

Despite the Phase I ESA recommendation, the evidence provided by CURE showing the intensity of the military maneuvers in the vicinity of the Project, and Staff's acknowledgement of the potential for UXO on the Project site, the RSA does not require a preconstruction UXO survey. And despite the Applicant's knowledge of the Phase I recommendation and the Applicant's recognition that the gunnery range and army headquarters were located in the "general project area," the Applicant does not intend to conduct a stand-alone UXO survey. (July 12, 2010 Tr., pp. 350-351.)

Condition of Certification Waste-5 merely provides for the development of a plan to train construction workers to identify UXO. (Exh. 400, p. C.13-28.) Waste-5 is not sufficient mitigation to reduce impacts from UXO to construction worker safety to a level below significance. (Exh. 517, p. 9.) The RSA should include a condition of certification that would require a UXO survey for the Project area. The survey should be conducted by trained and credentialed UXO professionals and must be consistent with BLM and Army Corps of Engineers Guidance. (Exh. 517, p. 9.))

VI. CONCLUSION

The Commission cannot approve the Project as proposed. As it stands, the RSA does not satisfy fundamental requirements of CEQA. The RSA failed to adequately analyze and mitigate the Project's significant impacts on numerous species, including among others, the desert tortoise, Couch's spadefoot toad, desert kit fox, American badger, migratory birds, the golden eagle, and special-status bats. The RSA also failed to adequately analyze and mitigate significant impacts from the Project's use of HTF. Finally, the RSA failed to adequately analyze and mitigate significant impacts from the presence of unexploded ordnance ("UXO") on the Project site. Further, if the Commission approves the Project as proposed, the Commission will violate federal and State law.

Dated: July 26, 2010 Respectfully submitted

/s/____

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PROOF OF SERVICE

I, Bonnie Heeley, declare that on July 26, 2010 I served and filed copies of the attached **First Opening Brief of California Unions for Reliable Energy**. 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/genesis. 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 either 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," via personal service or via overnight mail as indicated.

I declare under penalty of perjury that the foregoing is true and correct. Executed at South San Francisco, CA on July 26, 2010.

Bonnie Heeley					
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