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STATE OF CALIFORNIA
ENERGY RESOURCES CONSERVATION
AND DEVELOPMENT COMMISSION

In the Matter of:	)	Docket No. 08-AFC-5
	)	
Application for Certification for the Imperial Valley Solar Project (formerly known as SES Solar Two Project), Imperial Valley Solar, LLC	)	August 18, 2010

REPLY BRIEF OF ENERGY COMMISSION STAFF

Introduction

On August 11, 2010, four parties to the Imperial Valley Solar project (IVS project or project) proceeding filed post-evidentiary hearing opening briefs. The briefs contain argument about a series of factual and legal topics that are germane to the issues that must be addressed in the Presiding Member's Proposed Decision (PMPD). The PMPD will address whether to certify the IVS project and, if so, under what conditions. It will be presented to the full California Energy Commission (Energy Commission for consideration later this year. By email on August 4, 2010, Hearing Officer Renaud ruled that Reply Briefs shall be due on August 18, 2010. This is Staff's Reply Brief, addressing those issues raised by other parties in Opening Briefs that Staff did not address in its Opening Brief.

Alternatives

1. <u>The Agricultural Lands Alternative is Infeasible.</u>

Intervener California Native Plant Society (CNPS) addresses the analysis of an alternative referred to as the Agricultural Lands Alternative. CNPS states that the analysis of that alternative is not complete because it omits possible cost reductions associated with the water savings associated with converting agricultural lands to an

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industrial use. (CNPS Opening Brief, p. 2.) CNPS apparently ignores the fact that the Staff found this alternative to be infeasible. (Exh. 302, p. B.2-73.) Although Staff is supportive of siting large solar plants on lands that have fewer natural resources, as agricultural lands tend to do, in this case, the alternative is infeasible for reasons other than cost. Therefore, the omission of certain savings in the analysis is immaterial.

2. The Energy Commission Should Not Approve a Draft Least Environmentally Damaging Practicable Alternative (LEDPA) That Has Not Been the Subject of a Staff Analysis of Potential Impacts and Feasible Mitigation That May Be Needed.

In its Opening Brief, the Applicant argues that the Energy Commission can approve the LEDPA because it is smaller. (Applicant's Opening Brief, p. 11.) Staff does not disagree with the general legal principles identified by the Applicant, but does point out that there are two important assumptions underlying the Applicant's argument. First, the Applicant assumes that the draft LEDPA that is in the record (Exh. 129) is identical or substantially similar to what the Unites States Army Corps of Engineers (USACE) will ultimately approve. However, even the draft LEDPA itself indicates that it may be updated upon review of the Supplemental Staff Assessment (Exh. 302), the Final Environmental Impact Statement, or public comment. (Exh. 129, p.1.) The draft LEDPA may differ from the approved LEDPA in significant ways, and should not be the basis of the Energy Commission's decision.

In addition, the Applicant assumes that, because the total footprint of the draft LEDPA is smaller than that of the originally-proposed project, the environmental impacts are less. However, the reduction in affected acreage is primarily due to a reduction in the number and width of roads, but use of the roads would still be required for maintenance of the Suncatchers, with the potential for impacts. In its Opening Brief, Staff pointed out that the Applicant was unable to answer questions about whether the removal of numerous spur roads leading to thousands of individual Suncatchers would improve air emissions associated with the project, given that maintenance of the Suncatchers will still be required. (July 27, 2010, Reporter's Transcript (RT) 377:7-12 (Fitzgerald).) Moreover, the project's significant effects on biological resources and impacts associated with stream geomorphology, sediment transport and water quality issues are not necessarily avoided with the draft LEDPA. The draft LEDPA will only avoid three of the 10 important drainages that are avoided with Staff's preferred alternative (Drainage Avoidance #1 Alternative). (Exh. 302, p. B.2-15; Exh. 129, p. 23.). The fact that the amount of aquatic resources affected is reduced compared to the

proposed project does not necessarily mean that the impacts of the alternatives are also reduced. It is notable that a reduction of the road widths under Staff's preferred alternative would likely result in a similar reduction in the acreage of aquatic resources impacted.

At the evidentiary hearings, Staff stated that it would evaluate the Draft LEDPA and inform the Committee of its recommendations should the Energy Commission so request. (July 27, 2010, RT 126: 6-8 (O'Brien).) Otherwise, there is in sufficient evidentiary support for the Draft LEDPA to serve as the basis for the Energy Commission's conclusions. In the absence of further analysis of the Draft LEDPA, Staff continues to recommend that the PMPD recommend approval of Drainage Avoidance #1 Alternative.

3. The Energy Commission does not Need the Final LEDPA to Determine Conformity with Federal Law.

California Unions for Reliable Energy (CURE) claims that the Energy Commission cannot certify the IVS project because the final LEDPA has not been released. Staff believes that the Energy Commission can make a conformity finding based on the likelihood, as evidenced by the Draft LEDPA, that the USACE will identify what is necessary to ensure the IVS project's conformity with the federal Clean Water Act. The draft LEDPA (Exh. 129) is substantial evidence that the USACE will issue a final LEDPA with required conditions for conformity with federal law. The Energy Commission has issued permits for projects for which Biological Opinions, required pursuant to the federal Endangered Species Act, and Prevention of Significant Deterioration (PSD) permits, required pursuant to the federal Clean Air Act, were pending. This case is no different, and the fact that the final LEDPA has not been released does not prevent the Energy Commission from finding that the project is likely to conform with the requirements of Section 404(b)(1) of the Clean Water Act.

Biological Resources

As reported to the Committee at the August 16, 2010 evidentiary hearing, Staff and Applicant have reached conceptual agreement on many previously unresolved issues in the area of Biological Resources. Staff's proposed Conditions of Certification on Biological Resources are attached as Appendix A of this Reply Brief; they are **BIO-6**, **-8**, **9**, **10**, **11**, **17**, **19**, and **21.**

Staff and Applicant are still in disagreement over Staff's position that the IVS project will cause significant adverse and unmitigable impacts as a result of the project's noise levels and the deaths of thousands of individual Flat-tailed Horned Lizards (FTHLs); as well as that the IVS project will cause significant adverse impacts to 881 acres of Peninsular Bighorn Sheep (PBHS) foraging habitat, which impacts should be mitigated through appropriate land acquisition and responsibility for long-term management and maintenance (LTMM) and transaction costs. Staff has previously briefed these matters, and this Reply Brief will only address the number of acres of PBHS foraging habitat impacted by the IVS project and the appropriate level of mitigation for impacts to PBHS.

1. PBHS Foraging Habitat Is Greater Than the California Rapid Assessment Model's (CRAM's) Identification of Acreage Actually Occupied by Vegetative Cover.

The Applicant asserts that the IVS project will impact only 247 acres of PBHS foraging habitat, based on the CRAM's estimate that 28% of the washes on the IVS project site provide vegetative cover. (Applicant's Opening Brief, pp. 19-20.) The Applicant faults Staff for basing its mitigation of 881 acres of PBHS foraging habitat on the "full number of jurisdictional acres of waters of the United States." (*Ibid.*) Staff and Applicant's differences are based on whether PBHS foraging habitat is defined solely by vegetative cover (Applicant's position) or by the area that includes foraging vegetation[1] as well as the water source for the vegetation (Staff's and wildlife agencies' position). The record evidence demonstrates the impropriety of relying on the CRAM to identify PBHS foraging habitat and the correctness of Staff's analysis, which is based on the acreage of Waters of the U.S. and Waters of the State.

As stated above, Applicant bases its identification of 247 acres of PBHS foraging habitat on the CRAM's estimation of an average of 28% vegetative cover in the washes on the IVS project site. There is no precedent for identifying PBHS foraging habitat based on a

[1] PBHS foraging vegetation includes shrubs and native grasses, pulp and fruit of various cacti, and a "large variety of [other] plant species" and other "available forage." (Exh. 302, p. C.2-43.)

modified CRAM analysis for quantifying vegetation in washes, and, in fact, sound science does not support such a basis. (July 27, 2010, RT 332:13-20 (Bleich).) Estimating plant cover based on CRAM methods may yield some PBHS foraging habitat, but it presents a distorted and insufficient metric of all possible PBHS foraging habitat. PBHS use the entirety of the low-lying areas and desert washes, in which the forage scrub grows. (*Id.* at RT 330:17-24 (Bleich).) Indeed, the full extent of PBHS foraging habitat depends on the "patterns and amounts of precipitation, and resultant productivity of vegetation." (Exh. 400, pp. 6-7.) Applicant's own witness admits to the high variability of foraging cover in ephemeral washes and the possibility that "all [washes] potentially – could be used [as foraging habitat]." (July 27, 2010, RT 54:9-14 (Mock).) By limiting the identification of PBHS foraging habitat to positively identified vegetative cover (the "actual amount of forage available"), which the CRAM does, the Applicant artificially reduces the actual acreage of PBHS foraging habitat. (*See* July 27, 2010, RT 54:7 (Mock).) As the entire IVS project site will be fenced, the 881 acres of PBHS foraging habitat will be excluded to PBHS. (Exh. 499-K, p. 17.) Accordingly, the Energy Commission should rely on Staff's definition of foraging habitat, which is based on the acreage of Waters of the U.S. and Waters of the State. (Exh. 302, pp. C.2-6, C.2-43; *see also* Exh. 400, pp. 6-8.)

As further evidence that Applicant's reliance on the CRAM is unreliable in quantifying PBHS foraging habitat, testimony indicates that CRAMs are intended to "[assess] wetland functional capacity or condition," not to identify wildlife habitat and certainly not to identify PBHS foraging habitat in desert environments. (Exh. 129, Attachment D, pp. 2-5; July 27, 2010, RT 334:9-12 (Bleich).) In other words, the CRAM may have underestimated the acreage of vegetative cover on the IVS project site. The Southern California Coastal Water Research Project appears to have adjusted the CRAM for use in the desert for this first time with respect to the IVS project. (Exh. 129, Attachment D, p. 3 ("This represents [the] first phase of a long-term research effort to refine, modify, and validate the Riverine CRAM for application to ephemeral washes in desert regions of California."); *see also* July 27, 2010, RT 334: 13-24 (Bleich).) "CRAM may be systematically biased against [ephemeral streams in the headwater reaches of very arid watersheds]." (Exh. 129, Attachment D, pp 4-5.) Only a calculation of the amount of Waters of the U.S. and Waters of the State within a site that is in fact PBHS foraging

habitat is reliable in determining the acreage of PBHS foraging habitat that must be mitigated. (Exh. 302, pp. C.2-6, C.2-43; *see also* Exh. 400, pp. 6-8.)

2. Correct Mitigation under California Environmental Quality Act (CEQA) for Impacts to PBHS Foraging Habitat Includes Land Acquisition and LTMM Costs.

The Applicant argues that its proposals for PBHS and aquatic resources mitigation, i.e., restoration and enhancement along Carrizo Creek, are supported by the U.S. Army Corps of Engineers and the U.S. Fish and Wildlife Service. (Applicant's Opening Brief, pp. 19-20.) As Staff discussed in its opening brief, restoration and enhancement along Carrizo Creek may be sufficient to address impacts to waters under the Clean Water Act, Section 404, but these activities along Carrizo Creek will not mitigate impacts to PBHS's foraging habitat in accordance with CEQA. (Staff's Opening Brief, pp. 12-13.) Only appropriate land acquisition and LTMM costs will effectively mitigate impacts to PBHS foraging habitat in conformity with CEQA, and the California Department of Fish and Game helped develop and supports Staff's conditions. (Exh. 302, pp. C.2-62, C.2-70 to C.2-71; July 27, 2010, RT 200:17-201:10 (Rodriguez); August 16, 2010, RT (Nishida)[2].)

Tamarisk removal and other restoration and enhancement activities along Carrizo Creek are not adequate mitigation for impacts to PBHS foraging habitat at the project stie. While tamarisk removal along the Carrizo Creek would provide some benefits to PBHS, such restoration and enhancement are only temporary at best, and the likelihood of increasing the foraging value for PBHS is de minimis because of the riparian nature of the Carrizo Creek (as opposed to ephemeral desert washes). (July 27, 2010, RT 339:5-20 (Bleich) ("Benefits incurred by big horn sheep through the removal of Tamarisk would, in my opinion, likely be limited to increased visibility and would not necessarily result in an increase in forage availability.").) Moreover, tamarisk removal at Carrizo Creek does nothing to mitigate the loss of high-quality forage for pregnant ewes, one of which has been sighted at the project site in March 2009. (Exh. 302, p. C.2-44; Exh. 400, p. 6.) Expert testimony also indicates that loss of valuable PBHS habitat that contains

[2] The Reporter's Transcript of the August 16, 2010 evidentiary hearing has not been published as of this Reply Brief's filing date, so a more specific citation is not yet available.

high-quality forage cannot be mitigated with dissimilar habitat in a location that historically has not been used by PBHS. (*Id.* at RT 340:7-16 (Bleich); Exh. 400, pp. 6-7.) Such inadequate mitigation would only *decrease* the availability of foraging habitat and fall short of adequate mitigation under CEQA.

Hydrology and Water Supply

1. The Energy Commission Should be Cautious in Protecting Residential Water Use and Err on the Side of Protecting Local Residents.

Staff and the Applicant disagree about how to interpret the limited data from the Boyer well to ascertain how much water local residents use. Staff relied on a conservative estimate based on 14 years of historical records and professional judgment about patterns of water use throughout the year. (Exh. 302, p. C.7-52-53; July 26, 2010, RT 221:20-25 – 223:1-23 (Fio).) The Applicant relied on an estimate provided by the owner of the well for the past two years, who uses an informal recording system in which residents fill up water containers, write down the amount they believe they have pumped, and leave money. (July 26, 2010, RT 176: 9-12 (Boyer).) As Staff pointed out at the evidentiary hearing, the owner's estimate of water use is less than what would be expected based on local per capita water use for Ocotillo. (July 26, 2010, RT 233: 2-12 (Deverel).)

The Applicant wants the Energy Commission to base its decision on the informal recording system of the well owner for the past two years. Staff notes that this data is not consistent with the other water use information in the record, and disagrees that the Applicant's approach is sufficient to protect residential water use and avoid significant impacts. The six acre-feet per year (afy) identified by Staff as necessary to protect residential customers' water supply is a relatively small percentage of the well production, but it could make an enormous difference to local residents. Staff urges the Committee to require the IVS project to leave this small amount of water available for residential water use.

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2. The Energy Commission Can Adopt a Condition of Certification Limiting Boyer Well Use to 34 afy.

CURE contends that the Boyer well may not provide sufficient water for the project and argues that Staff's assessment is inadequate. In the section of its Opening Brief addressing the feasibility of alternatives, Staff identified significant uncertainty, based on publicly available information, about the feasibility of projects using the Applicant's proposed technology. (Staff's Opening Brief, p. 5.) Staff has no information, however, that a condition of certification limiting project use to 34 afy from the Boyer well would cause the project to be infeasible. Despite the uncertainty about well use and project feasibility, Staff's assessment remains adequate. As the Court of Appeal for the Fifth District of California noted:

> We are not concluding respondent must first find a source of water for the "project" before an EIR will be adequate. We are concluding that an EIR for this project must address the impact of supplying water for the project.

(*Stanislaus Natural Heritage Project v. County of Stanislaus* (1996) 48 Cal.App.4th 182, 205.)

The Staff assessment identified the impacts associated with the use of the Boyer well, recommended mitigation for the impacts to residential users by limiting the amount of water that the project can use to 34 afy, and recommended that the Energy Commission find that the project's impacts to basin storage are significant and unmitigable. Notwithstanding CURE's claims to the contrary, the Energy Commission can rely on the Staff assessment to make the same conclusions.

CURE also contends that there is no evidence that the Boyer well is a reliable supply of water. CURE completely ignores Staff's analysis indicating that the well is a reliable source (Exh. 302, p. C.7-53) and presents no evidence to refute the Staff analysis. Even if Staff had not done so, CURE must do more than make assertions that the Boyer well may not be a reliable source. Staff has conducted an examination of the aquifer and the 14 years of production data from the Boyer well and determined that the Boyer well represents a reliable water supply. CURE's claim otherwise should be summarily rejected.

3. The Project's Contribution to Overdraft of the Ocotillo/Coyote Groundwater Basin Should be Deemed to Contribute to Significant Cumulative Impacts.

As noted in Staff's Opening Brief, the Ocotillo/Coyote aquifer is a sole-source aquifer, providing more than 50% of the drinking water for local residents. (Exh. 302, p. C.7-11.) The basin is in overdraft (*id.* at C.7-41), and there is no management of the groundwater basin based on safe yield. (July 26, 2010, RT 160:22-25 – 161:1(Scott).) The only other sources of water in the vicinity of the Boyer well are other wells that produce water from the same aquifer. (Exh. 302, p.C.7-50.) The water levels in all alluvial aquifer wells have been declining for 30 years (Exh. 302, p. C.7-42), and the decline will be exacerbated by this project. (*Id.* at p. C.7-44.)

Staff believes this project's water use is a cumulatively considerable contribution to a significant impact. As with many such impacts, the project's individual contribution may be small, but the cumulative impact is severe. It is difficult to imagine a more precious resource than the sole source of drinking water in a desert community. Staff firmly rejects the Applicant's suggestion that only when faced with the potential of dewatering should the Energy Commission find groundwater use to cause a significant impact. (Applicant's Opening Brief, p. 17.) Staff has acknowledged that defining a "bright line" for identifying incremental contributions to cumulative impacts that are significant is challenging. However, in evaluating impacts to a water supply that is the sole source of drinking water for desert communities, Staff believes a conservative approach is called for, and the project's use of Boyer well water should be identified as a significant adverse cumulative impact.

4. Staff's Analysis of the Seeley Wastewater Treatment Facility (SWWTF) Is Adequate Should the Upgrade Be Permitted and Recycled Water Be Available for Sale.

CURE contends that the Energy Commission cannot find that recycled water from the SWWTF is available because a permit for the SWWTF upgrade has not been issued. (CURE Opening Brief, p. 5.) CURE, however, misunderstands the Applicant's request and the nature of the Staff analysis. There is at least one, and there are possibly two, sources of water for the IVS project, and Staff has analyzed both of these sources: recycled water from the SWWTF is one option for the IVS project, and water from the Boyer well is another option. (Exh. 302 pp. C.7-40–41, 50.) Therefore, the Energy

Commission does not need to find that water from the SWWTF will be available, as water for the IVS project from the Boyer well clearly is available to the project.

CURE also contends that the Energy Commission cannot allow the use of SWWTF water for the IVS project until all impacts from the project are analyzed and significant impacts are mitigated. (CURE Opening Brief, p. 6.) CURE bases its claim on the assertion that it is "undisputed" that the SWWTF expansion is a condition precedent for operation of the IVS project. (CURE Opening Brief, p. 7.) However, Staff has not included a condition of certification requiring the use of this water. As noted above, Staff has analyzed two water sources and identified conditions of certification addressing both.

More importantly, CURE ignores the fact that Staff *did* provide an analysis of impacts associated with the SWWTF expansion, based on the information that is currently available. (Exh. 301.) Staff used the information in the Initial Study that was prepared for the expansion, and also updated its analysis in relevant technical areas with new data that is being collected as part of the Environmental Impact Report (EIR) that the Seeley County Water District (SCWD) is in the process of preparing pursuant to CEQA. (*See, e.g.*, Exh. 302, p. C-2.2.) In addition, the cases cited by CURE as authority for its position are inapposite, as Staff has not ignored the upgrades at the SWWTF that are a necessary precedent to water being available to the IVS project. Staff has analyzed the impacts to the extent that it has information, and has identified the types of mitigation that it believes will be required by the lead agency for the project. CURE has not cited any cases that hold that a lead agency must withhold its approval of a project until a related project has undergone complete review. Nor can it, for no such case exists. In fact, Public Resources Code section 21081 specifically allows a lead agency (such as the Energy Commission) to make a finding that other public agencies (such as the local permitting authorities) possess the jurisdiction to impose mitigation on impacts the lead agency has identified pursuant to CEQA.

CURE follows this discussion in its brief with many pages attacking the sufficiency of the environmental information provided in the Supplemental Staff Assessment and Exhibit 301 about the SWWTF upgrades. It correctly observes that ongoing environmental review conducted by another lead agency is not yet complete. (CURE Opening Brief, p. 9.) However, as noted above, there is no legal authority that requires

the Energy Commission to wait until the SCWD has completed its review of the SWWTF upgrade. Nor is there a requirement that the Energy Commission undertake a second, duplicative review of the environmental effects of the expansion. Yet CURE's arguments imply that those are the two choices available to the Energy Commission. CURE would either have the Energy Commission extend its decisionmaking process far beyond the one-year statutory deadline (Pub. Resources Code, § 25522) or engage in the same hydrologic analysis and the same wildlife surveys that are being undertaken by SCWD.

As part of its analysis of the SWWTF expansion, Staff summarized the types of mitigation measures that could be required by SCWD to address project-related impacts. (Exh. 301.) In an effort to challenge the Staff analysis, CURE points out that the mitigated negative declaration that preceded the current EIR identifies mitigation measures to address the impact of the expansion on wetlands. (CURE Opening Brief, p. 11.) Remarkably, CURE then states that the Energy Commission cannot approve the IVS project without finding that the mitigation is no longer feasible or necessary. (*Ibid.*) It is the lead agency for the expansion -- SCWD -- that is responsible for making findings about the impacts of the expansion and any needed mitigation. The Energy Commission has no jurisdiction to impose on the SWWTF conditions under which the expansion will be permitted. Moreover, the lead agency can make findings that the permitting authority will impose conditions of certification in situations such as these. (Pub. Resources Code, § 21081, subd. (a)(2).) Nevertheless, Staff has collected the available information, analyzed potential impacts, and identified possible mitigation measures for impacts that may result from the SWWTF upgrade.

5. <u>Staff Evaluated the Potential for Erosion and Sedimentation Impacts.</u>

CURE challenges the sufficiency of Staff's analysis of hydrology and sedimentation, stating that the presence of cryptobiotic crusts and desert pavement will affect hydrology and sedimentation processes that Staff has ignored. (CURE Opening Brief, p. 28.) CURE ignores the fact that Staff specifically identified increased erosion potential due to the crytobiotic soils (referred to as "surface crust" in the Supplemental Staff Assessment (SSA)) and desert pavement that would be removed as a result of the project. (Exh. 302, p.C.7-28.) Moreover, Staff did *not* testify that establishing the existing amount of desert pavement and cryptobiotic crusts would be essential to

evaluating IVS project impacts, as CURE contends. (CURE Opening Brief, p. 29.) In fact, Staff testified that the Drainage, Erosion, and Sedimentation Control Plan (DESCP) required by **SOIL & WATER-1** would ensure that impacts due to the disturbance of these features are minimized. (*Ibid.*) The DESCP is site specific and will contain detailed information about the measures that will be required to mitigate impacts. The DESCP contains performance standards and will be prepared after more detailed design work has been completed, allowing for a more precise identification of the types of measures that are required to meet the performance standards.

CURE also contends that the Supplemental Staff Assessment ignores impacts to the Salton Sea, New River, and Imperial Valley Drains. Staff disagrees. Staff reviewed the analyses that the Applicant prepared and concluded that the project has the potential to create sedimentation impacts downstream. (Exh. 302, pp. C.7-37 to C.7-38.) This is one of the reasons that Staff recommends Drainage Avoidance #1 Alternative, which will lessen the impacts due to construction of Suncatchers in the drainages. Staff has not ignored these potential impacts, and CURE is incorrect in saying that it has.

6. Applicant's Changes in Exhibit 147 Are Appropriate.

The changes to the timing in the first sentence of the verification identified in Exhibit 147 are correct. Staff failed to strike "60" when attempting to replace it with the underlined "30" in **SOIL&WATER-2**, and **-9** in Appendix A to Staff's Opening Brief.

Traffic and Transportation

The Applicant requested changes to **TRANS-1**, **-2**, **-3**, and **-4**. Only the change to **TRANS-3** was substantive. Staff opposes the timing change to **TRANS-1** and **-3** because of the time that is typically required to coordinate with the County and address any County concerns. Shortening the review time to 30 days could hamper the County's ability to effectively participate. Staff does not oppose the timing change to **TRANS-2**.

Staff opposes removing the phrase "sub-surface" in **TRANS-3** as it is appropriate that the project owner document and repair any sub-surface deterioration. Staff does not believe this involves invasive testing. Staff opposes the timing change to **TRANS-4** because it requires coordinating review amongst four different agencies, and a 30-day timeframe could hamper those agencies' ability to effectively participate.

Visual Resources

Staff agrees with the changes identified in Exhibit 147 for **VIS-4** and **VIS-6**. Staff erred in not identifying 223 feet in Appendix A to its Opening Brief.

Worker Safety & Fire Protection

Staff agrees that the Applicant's proposed changes in Exhibit 147 to **WORKER SAFETY-8** are appropriate.

Respectfully submitted,

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Appendix A

Staff's Proposed Conditions of Certification

WORKER ENVIRONMENTAL AWARENESS PROGRAM (WEAP)

BIO-6 The project owner shall develop and implement project-specific Worker Environmental Awareness Program (WEAP) and shall secure approval for the WEAP from the BLM Biologist, USFWS, CDFG, and the CPM. The WEAP shall be administered to all onsite personnel including surveyors, construction engineers, employees, contractors, contractor's employees, supervisors, inspectors, subcontractors, and delivery personnel. The WEAP shall be implemented during site mobilization, ground disturbance, grading, construction, operation, and closure. The WEAP shall:

Be developed by or in consultation with the Designated Biologist and consist of an on-site or training center presentation in which supporting electronic media and written material, including wallet-sized cards with summary information on special status species and sensitive biological resources, is made available to all participants;

Discuss the locations and types of sensitive biological resources on the project site and adjacent areas, explain the reasons for protecting these resources, and the function of flagging in designating sensitive resources and authorized work areas;

Place special emphasis on FTHL, including information on physical characteristics, distribution, behavior, ecology, sensitivity to human activities, legal protection and status, penalties for violations, reporting requirements, and protection measures;

Include signage to be posted at the entrance to the project site and throughout the project site which has the following information:

- ~~15~~ 25 miles per hour speed limit (for all paved or stabilized roads) or 10 miles per hour speed limit (for all unpaved roads that are not stabilized) except in specific areas identified by the Designated Biologist where the speed limit on paved and stabilized roads needs to be less than 25 miles per hour to lessen wildlife impacts;
- A picture of the FTHL; and
- Reminder to check under vehicles before driving.

Include a discussion of fire prevention measures to be implemented by workers during project activities; request workers to dispose of cigarettes and cigars appropriately and not leave them on the ground or buried;

Present the meaning of various temporary and permanent habitat protection measures;

Identify whom to contact if there are further comments and questions about the material discussed in the program; and

Include a training acknowledgment form to be signed by each worker indicating that they received the WEAP training and shall abide by the guidelines.

The specific program can be administered by a competent individual(s) acceptable to the Designated Biologist.

Verification: At least 30 days prior to the start of any project-related site disturbance activities, the project owner shall provide to the BLM Biologist and the CPM a copy of the draft WEAP and all supporting written materials and electronic media prepared or reviewed by the Designated Biologist and a resume of the person(s) administering the program.

The project owner shall provide in the Monthly Compliance Report the number of persons who have completed the training in the prior month and a running total of all persons who have completed the training to date. At least ten days prior to site and related facilities mobilization, the project owner shall submit two copies of the BLM- and CPM-approved final WEAP.

Training acknowledgement forms signed during construction shall be kept on file by the project owner for at least six months after the start of commercial operation.

Throughout the life of the project, the worker education program shall be repeated annually for permanent employees, and shall be routinely administered within one week of arrival to any new construction personnel, foremen, contractors, subcontractors, and other personnel potentially working within the project area. Upon completion of the orientation, employees shall sign a form stating that they attend the program and understand all protection measures. These forms shall be maintained by the project owner and shall be made available to the BLM Biologist and the CMP upon request. Workers shall receive and be required to visibly display a hardhat sticker or certificate that they have completed the training.

Should the Designated Biologist, in consultation with the BLM Biologist and the CPM, identify an area where the speed limit must be lowered on paved and stabilized roads, new signage must be posted with the new lowered speed limit within one week of this determination and photographic verification provided to the CPM within the same time period. This speed limit would be adhered to until additional signage specifies otherwise. Announcement of the location(s) of the area designated with the lowered

speed limits must be made to the employees within 24 hours of the Designated Biologist's determination.

During project operation, signed statements for operational personnel shall be kept on file for six months following the termination of an individual's employment.

IMPACT AVOIDANCE AND MINIMIZATION MEASURES

BIO-8 The project owner shall undertake the following measures to manage the construction site and related facilities in a manner to avoid or minimize impacts to biological resources during construction and operation:

The boundaries of all areas to be disturbed (including staging areas, access roads, and sites for temporary placement of spoils) shall be delineated with stakes and flagging prior to construction activities. Spoils shall be stockpiled in disturbed areas lacking native vegetation or where habitat quality is poor. Spoil sites shall not be located within drainages or locations that may be subjected to high storm flows, where spoil shall be washed back into a drainage or lake. Disturbance of shrubs and surface soils due to stockpiling shall be minimized. All disturbances, vehicles and equipment shall be confined to the flagged areas.

Whenever possible, equipment and vehicles shall use existing surfaces or previously disturbed areas rather than clearing vegetation and grading the ROW. Where grading is necessary, surface soils shall be stockpiled and replaced following construction to facilitate habitat restoration.

To the extent possible, existing roads shall be used for travel and equipment storage. New and existing roads that are planned for construction, widening or other improvements shall not extend beyond the flagged impact area as described above. All vehicles passing or turning around would do so within the planned impact area or in previously disturbed areas. Where new access is required outside of existing roads (e.g. new spur roads associated with both transmission line options) or the construction zone, the route would be clearly marked (i.e., flagged and/or staked) prior to the onset of construction.

Newly created access routes shall be restricted by constructing barricades, erecting fences with locked gates at road intersections, and/or by posting signs. In these cases, the project proponent shall maintain, including monitoring, all control structures and facilities for the life of the project and until habitat restoration is complete.

Vehicular traffic during project construction and operation shall be confined to existing routes of travel to and from the project site, and cross country vehicle and equipment use outside designated work areas shall be prohibited. The speed limit shall not exceed 10 ~~15~~ miles per hour on all unpaved roads that are not stabilized and 25 miles per hour on all paved or stabilized roads on the project site except in specific areas identified by the Designated Biologist where the speed limit on paved and stabilized roads needs to be less than 25 miles per hour to lessen wildlife impacts.

Transmission lines, access roads, pulling sites, storage and parking areas shall be designed, installed, and maintained with the goal of minimizing impacts to native plant communities and sensitive biological resources.

Transmission lines and all electrical components shall be designed, installed, and maintained in accordance with the Avian Power Line Interaction Committee's (APLIC's) *Suggested Practices for Avian Protection on Power Lines* (APLIC 2006) and *Mitigating Bird Collisions with Power* Lines (APLIC 2004) to reduce the likelihood of large bird electrocutions and collisions.

Road surfacing and sealants as well as soil bonding and weighting agents used on unpaved surfaces shall be non-toxic to wildlife and plants.

Facility lighting shall be designed, installed, and maintained to prevent side casting of light towards wildlife habitat. Lighting shall be kept to the minimum level for safety and security needs by using motion or infrared light sensors and switches to keep lights off when not required, and shielding operational lights downward to minimize skyward illumination. No high intensity, steady burning, bright lights such as sodium vapor or spotlights shall be used. FAA visibility lighting shall employ only strobed, strobe-like or blinking incandescent lights, preferably with all lights illuminating simultaneously. Minimum intensity, maximum "off-phased" duel strobes are preferred, and no steady burning lights (e.g., L-810s) shall be used.

Parking and storage shall occur where FTHL removal surveys have been conducted.

At the end of each work day, the Designated Biologist shall ensure that all potential wildlife pitfalls (trenches, bores and other excavations) have been inspected for wildlife and then backfilled. If backfilling is not feasible, all trenches, bores, and other excavations shall be sloped at a 3:1 slope at the ends to provide wildlife escape ramps, or covered to completely prevent wildlife access. All trenches, bores and other excavations outside the permanently fenced area shall be inspected periodically throughout and at the end of each workday by the Designated Biologist or a Biological Monitor. Should a FTHL or other wildlife become trapped, the Designated Biologist or Biological Monitor shall remove and relocate the individual to a safe location.

During construction, examine areas of active surface disturbance periodically—at least hourly when surface temperatures exceed 29°C (85°F) for the presence of FTHL.

Any construction pipe, culvert, or similar structure with a diameter greater than three inches, stored less than eight inches aboveground for one or more nights, would be inspected for wildlife before the material is moved, buried, or capped. As an alternative, all such structures may be capped before being stored outside the fenced area, or placed on pipe racks.

Water applied to dirt roads and construction areas (trenches or spoil piles) for dust abatement shall use the minimal amount needed to meet safety and air quality standards in an effort to prevent the formation of puddles, which could attract FTHL predators to construction sites. During construction, a Biological Monitor shall patrol these areas to ensure water does not puddle and attract common ravens, and other wildlife to the site, and shall take appropriate action to reduced water application rates where necessary.

During construction, road killed animals or other carcasses detected by personnel on roads associated with the Project area will be reported immediately to a Biological Monitor or Designated Biologists, who will remove the roadkill promptly. During operations, the Project Environmental Compliance Monitor will be notified of any roadkills and promptly remove and dispose of any roadkills to discourage scavenger activity. For special-status species road-kill, the Biological Monitor shall contact CDFG and USFWS within 1 working day of receipt of the carcass for guidance on disposal or storage of the carcass. The Biological Monitor shall report the special-status species record as described in **BIO-11** below.

All vehicles and equipment shall be maintained in proper working condition to minimize the potential for fugitive emissions of motor oil, antifreeze, hydraulic fluid, grease, or other hazardous materials. The Designated Biologist shall be informed of any hazardous spills immediately as directed in the project Hazardous Materials Plan. Hazardous spills shall be immediately cleaned up and the contaminated soil would be properly disposed of at a licensed facility. Servicing of construction equipment shall take place only at a designated area. Service/maintenance vehicles shall carry a bucket and pads to absorb leaks or spills.

All contractors, subcontractors, employees and visitors shall comply with litter and pollution laws. During construction all trash and food-related waste shall be placed in self-closing containers and removed ~~daily from the site~~ regularly to prevent overflow. Workers shall not feed wildlife, or bring pets to the project site. Except for law enforcement personnel, no workers or visitors to the site shall bring firearms or weapons.

Standard erosion control measures shall be implemented for all phases of construction and operation where sediment run-off from exposed slopes threatens to enter "Waters of the State" and/or "Waters of the U. S.". Sediment and other flow-restricting materials shall be moved to a location where they shall not be washed back into the stream. All disturbed soils and roads within the Project site shall be stabilized to reduce erosion potential, both during and following construction except for those portions of roads crossing Waters of the U.S. where soil tackifiers shall not be

used. Areas of disturbed soils (access and staging areas) with slopes toward drainages shall be stabilized to reduce erosion potential.

If preconstruction site mobilization requires ground-disturbing activities such as for geotechnical borings or hazardous waste evaluations, a Designated Biologist or Biological Monitor shall be present to monitor any actions that could disturb soil, vegetation, or wildlife.

The owner shall minimize road building, construction activities, and vegetation clearing within ephemeral drainages to the extent feasible.

- The project owner shall not allow water containing mud, silt or other pollutants from grading, aggregate washing, or other activities to enter a lake or flowing stream or be placed in locations that may be subjected to high storm flows.

- Raw cement/concrete, broken concrete, debris, soil, silt, sand, bark, slash, sawdust, rubbish, asphalt or washings thereof, paint or other coating material, oil or other petroleum products, or any other substances which could be hazardous to vegetation or wildlife resources, resulting from project related activities shall be prevented from contaminating the soil and/or entering waters of the state. These materials, placed within or where they may enter a drainage or lake, by project owner or any party working under contract or with the permission of the project owner shall be removed immediately.

- When operations are completed, any excess materials or debris shall be removed from the work area. No rubbish shall be deposited within 150 feet of the high water mark of any drainage.

- No equipment maintenance shall be done within 150 feet of any ephemeral drainage except in designated maintenance areas where petroleum products or other pollutants from the equipment may not enter these areas under any flow.

- The project owner must have a Frac-Out Contingency Plan approved by CDFG and the CPM prior to commencement of construction of the reclaimed water pipeline for horizontal directional drilling under the waterways.

Verification: All mitigation measures and their implementation methods shall be included in the BRMIMP and implemented. Implementation of the measures would be reported in the Monthly Compliance Reports by the Designated Biologist. Within 30 days after completion of project construction, the project owner shall provide to the

CPM, for review and approval, a written construction termination report identifying how measures have been completed.

FLAT-TAILED HORNED LIZARD CONSTRUCTION MONITORING PROGRAM AND OCCUPANCY STUDY

BIO-9 The project owner shall implement conservation measures and/or design features identified in the USFWS Conferencing Opinion that would avoid, minimize, and offset potential adverse effects to the FTHL into the Project's BRMIMP.

In addition, the project owner shall prepare a Before-After Control-Impact (BACI) Occupancy Estimation Study that would analyze the persistence of FTHL onsite after construction and during plant operations. At a minimum, the Study shall include:

- Parameters to be measured;
- Sample size;
- Level of effort per plot;
- Assessment approach; and
- Verification of scat source and extirpation of habitat.

The Study shall be approved by USFWS, BLM, and Energy Commission in consultation with CDFG, and shall be incorporated into the project's BRMIMP and implemented.

Verification: No more than 30 days following the publication of the Energy Commission License Decision or the Record of Decision/ROW Issuance, whichever comes first, the project owner shall submit to the CPM, BLM's Biologist, USFWS, and CDFG a final BACI Occupancy Estimation Study. Modifications to the BACI Occupancy Estimation Study shall be made only after approval from BLM's Biologist, USFWS, and the CPM, in consultation with CDFG. Within 30 days of completion of FTHL preconstruction occupancy surveys, the Designated Biologist shall submit a report to the CPM, BLM Biologist, USFWS, and CDFG describing the results of the survey.

During construction, the Designated Biologist shall submit a quarterly report describing the results of any removal surveys required by the Conferencing Opinion to the CPM, BLM Biologist, USFWS, and CDFG. The removal survey report shall include the FTHL survey results, capture and release locations of any FTHL encountered, description of any project related deaths or injuries detected during the study or at any other time, and any other information needed to demonstrate compliance with the measures described above. Following the completion of the fourth quarter of monitoring the Designated Biologist shall prepare an Annual Report that summarizes the year's data, analyzes any project-related FTHL fatalities or injuries detected, and provides recommendations for future monitoring and any adaptive management actions needed. The Annual Report shall be provided to the CPM, BLM's Biologist, CDFG, and USFWS. Post-construction sampling reports will be due to the CPM, BLM Biologist, USFWS, and CDFG by January 31st after sampling has taken place. The post-construction sampling report shall include the FTHL survey results, capture and release locations of any FTHL

encountered, whether mitigation and adaptive management measures are necessary, and any other information needed to demonstrate compliance with the measures described above. After the BACI Occupancy Estimation Study is completed, the project owner or contractor shall prepare a ~~paper~~draft document that describes the study design and results to be submitted to ~~a peer-reviewed scientific journal~~the Flat-Tailed Horned Lizard Interagency Coordinating Committee for review. Proof of submittal shall be provided to BLM's Biologist and the CPM within one year of concluding the monitoring study.

SPECIAL STATUS SPECIES HABITAT COMPENSATORY MITIGATION

This condition is designed to compensate for project-related impacts to habitat for FTHL, burrowing owl, golden eagle, American badger, and desert kit fox. However, to the extent that any compensation land acquired under this condition satisfies the selection criteria for **BIO-17,** such compensation acreage acquired pursuant to this condition may be used to fulfill all or a portion of **BIO-17**.

BIO-10 To fully mitigate for habitat loss for FTHL, burrowing owl, golden eagle, American badger, and desert kit fox, the project owner shall provide compensatory mitigation acreage of 6,619.9 acres. This figure was calculated as follows: a 1:1 ratio for 6,063.1 acres of impact outside of the FTHL Management Area (MA), and a 6:1 ratio for impacts to 92.6 acres within the FTHL MA. These impact acreages are to be adjusted to reflect the final approved project footprint. For purposes of this condition, the project footprint means all lands disturbed in the construction and operation of the IVS Project, including the offsite transmission line, as well as undeveloped areas inside the Project's boundaries that will no longer provide viable long-term habitat for the species mentioned above. To satisfy this condition, the project owner shall acquire, protect and transfer to an approved land manager no fewer than 6,619.9 acres of FTHL, burrowing owl, golden eagle, American badger and desert kit fox habitat lands (adjusted to reflect the final project footprint), and shall also provide funding for the initial improvement and long-term maintenance and management of the acquired lands, and comply with other related requirements in this condition. Costs of these requirements are estimated to be ~~$9,386,637.37~~ $11,969,549.33 based on the acquisition of 6,619.9 acres (consult the **Biological Resources Mitigation/Compensation Cost Estimate Table ~~5~~** for a complete breakdown of estimated costs). This includes an estimated per-acre cost of $500 for acquisition, a pre-acquisition liability survey at no less than ~~$2,500~~ $3,000 per parcel (assuming 40 acres per parcel), appraisal fees at ~~$3,000~~ $5,000 per parcel, $27 per acre for initial habitat improvement, ~~BLM~~ agency internal costs for transfer of land estimated at ~~$772,011.07~~ $580,896.23, administrative costs of $330,995.00 estimated at 10% of land costs. ~~and~~ In addition to these fees, a charge of $692 per acre for long-term management is anticipated at a cost of $4,580,970.80. The estimated subtotal for acquisition and long term management of the 6,619.9 acres would be $11,969,549.33.

In lieu of acquiring lands itself, the project owner may satisfy the requirements of this condition by depositing funds into the Renewable Energy Action Team (REAT) Account established with the National Fish and Wildlife Foundation (NFWF), as described in Section 3.i., below. If the project owner elects to use the REAT Account with NFWF, a total of $279,467.06 in fees will be required by NFWF including the following: a ~~7%~~ 3 percent NFWF fee (totaling ~~$682,633.38~~$221,657.36); a $12,000 account establishment fee; and a $45,809.71 account management fee ~~for the land transfer will be added to the costs to comply with this condition,~~. This would bring the total estimated cost of fulfilling this condition to ~~$10,434,538.75~~ $12,249,016.39.

The actual costs to comply with this condition will vary depending on the final project footprint, the actual costs of acquiring compensation habitat, the costs of initially improving the habitat, and the actual costs of long-term management as determined by a Property Analysis Record (PAR) report. The 6,619.9-acre habitat requirement, and associated funding requirements based on that acreage, will be adjusted up or down if there are changes in the final project footprint.

The requirements for the acquisition, initial improvement, protection and long-term maintenance and management of compensation lands include all of the following:

1. Selection Criteria for Compensation Lands. The compensation lands selected for acquisition shall:

    a. be within in or near FTHL Management Areas (MAs) in the Colorado Desert, with potential to contribute to FTHL habitat connectivity and build linkages between FTHL MAs, known populations of FTHLs, and/or other preserve lands;

    b. provide high to moderate quality habitat for FTHL with capacity to regenerate naturally when disturbances are removed, though moderate to good quality habitat is acceptable near protected FTHL habitats;

    c. be near larger blocks of lands that are either already protected or planned for protection, or which could feasibly be protected long-term by a public resource agency or a non-governmental organization dedicated to habitat preservation;

    d. be connected to lands where FTHLs can be reasonably expected to occur currently occupied by FTHL, based on habitat or historic occurrences, ideally with populations that are stable, recovering, or likely to recover;

    e. ideally contain soils that are stable and not suffering erosional damage;

f. not be characterized by high densities of invasive species, either on or immediately adjacent to the parcels under consideration, that might jeopardize habitat recovery and restoration;

g. not contain hazardous wastes that cannot be removed to the extent that the site could not provide suitable habitat; and

h. have water and mineral rights included as part of the acquisition, unless the CPM, in consultation with CDFG, BLM and USFWS, agrees in writing to the acceptability of land without these rights.

2. Review and Approval of Compensation Lands Prior to Acquisition. The Project owner shall submit a formal acquisition proposal to the CPM describing the parcel(s) intended for purchase. This acquisition proposal shall discuss the suitability of the proposed parcel(s) as compensation lands for FTHL, burrowing owl, golden eagle, American badger, and desert kit fox in relation to the criteria listed above, and must be approved by the CPM. The CPM will share the proposal with and consult with CDFG, BLM, and the USFWS before deciding whether to approve or disapprove the proposed acquisition.

3. Compensation Lands Acquisition Requirements. The project owner shall comply with the following requirements relating to acquisition of the compensation lands after the CPM, in consultation with CDFG, BLM, and the USFWS, has approved the proposed compensation lands:

a. Preliminary Report. The project owner, or approved third party, shall provide a recent preliminary title report, initial hazardous materials survey report, biological analysis, and other necessary or requested documents for the proposed compensation land to the CPM. All documents conveying or conserving compensation lands and all conditions of title are subject to review and approval by the CPM, in consultation with CDFG, BLM and the USFWS. For conveyances to the State, approval may also be required from the California Department of General Services, the Fish and Game Commission and the Wildlife Conservation Board.

b. Title/Conveyance. The project owner shall acquire and transfer fee title to the compensation lands, a conservation easement over the lands, or both fee title and conservation easement, as required by the CPM in consultation with CDFG. Any transfer of a conservation easement or fee title must be to CDFG, a non-profit

organization qualified to hold title to and manage compensation lands (pursuant to California Government Code section 65965), or to BLM or other public agency approved by the CPM in consultation with CDFG. If an approved non-profit organization holds fee title to the compensation lands, a conservation easement shall be recorded in favor of CDFG or another entity approved by the CPM. If an entity other than CDFG holds a conservation easement over the compensation lands, the CPM may require that CDFG or another entity approved by the CPM, in consultation with CDFG, be named a third party beneficiary of the conservation easement. The project owner shall obtain approval of the CPM, in consultation with CDFG, of the terms of any transfer of fee title or conservation easement to the compensation lands.

c. Initial Protection and Habitat Improvement. The project owner shall fund activities that the CPM, in consultation with the CDFG, USFWS and BLM, requires for the initial protection and habitat improvement of the compensation lands. These activities will vary depending on the condition and location of the land acquired, but may include trash removal, construction and repair of fences, invasive plant removal, and similar measures to protect habitat and improve habitat quality on the compensation lands. The costs of these activities are estimated at $27 an acre, but will vary depending on the measures that are required for the compensation lands. A non-profit organization, CDFG or another public agency may hold and expend the habitat improvement funds if it is qualified to manage the compensation lands (pursuant to California Government Code section 65965), if it meets the approval of the CPM in consultation with CDFG, and if it is authorized to participate in implementing the required activities on the compensation lands. If CDFG takes fee title to the compensation lands, the habitat improvement fund must be paid to CDFG or its designee.

d. Property Analysis Record. Upon identification of the compensation lands, the Project owner shall conduct a ~~Property Analysis Record (~~PAR~~)~~ or PAR-like analysis to establish the appropriate amount of the long-term maintenance and management fund to pay the in-perpetuity management of the compensation lands. The PAR or PAR-like analysis must be approved by the CPM,

in consultation with CDFG, before it can be used to establish funding levels or management activities for the compensation lands.

e. Long-term Maintenance and Management Funding. The Project owner shall provide money to establish an account with non-wasting capital that will be used to fund the long-term maintenance and management of the compensation lands. The amount of money to be paid will be determined through an approved PAR or PAR-like analysis conducted for the compensation lands. The amount of required funding is initially estimated to be $692 for every acre of compensation lands. If compensation lands will not be identified and a PAR or PAR-like analysis completed within the time period specified for this payment (see the verification section at the end of this condition), the Project owner shall either provide initial payment of $4,580,970.80 (calculated at $692 an acre for 6,619.9 acres) or the project owner shall include $4,580,970.80 to reflect this amount in the security that is provided to the Energy Commission under section 3.h. of this condition. The amount of the required initial payment or security for this item shall be adjusted for any change in the project footprint as described above. If an initial payment is made based on the estimated per-acre costs, the project owner shall deposit additional money as may be needed to provide the full amount of long-term maintenance and management funding indicated by a PAR or PAR-like analysis, once the analysis is completed and approved. If the approved analysis indicates less than $692 an acre will be required for long-term maintenance and management, the excess paid will be returned to the project owner. The project owner must obtain the CPM's approval of the entity that will receive and hold the long-term maintenance and management fund for the compensation lands. The CPM will consult with CDFG before deciding whether to approve an entity to hold the project's long-term maintenance and management funds.

The project owner shall ensure that an agreement is in place with the long-term maintenance and management fund holder/manager to ensure the following requirements are met:

i. Interest. Interest generated from the initial capital long-term maintenance and management fund shall

be available for reinvestment into the principal and for the long-term operation, management, and protection of the approved compensation lands, including reasonable administrative overhead, biological monitoring, improvements to carrying capacity, law enforcement measures, and any other action that is approved by the CPM in consultation with CDFG and is designed to protect or improve the habitat values of the compensation lands.

ii. Withdrawal of Principal. The long-term maintenance and management fund principal shall not be drawn upon unless such withdrawal is deemed necessary by the CPM, in consultation with CDFG, or by the approved third-party long-term maintenance and management fund manager, to ensure the continued viability of the species on the compensation lands.

iii. Pooling Long-Term Maintenance and Management Funds. An entity approved to hold long-term maintenance and management funds for the Project may pool those funds with similar non-wasting funds that it holds from other projects for long-term maintenance and management of compensation lands for local populations of ~~desert tortoise~~FTHL. However, for reporting purposes, the long-term maintenance and management funds for this Project must be tracked and reported individually to the CPM and CDFG.

f. Other expenses. In addition to the costs listed above, the project owner shall be responsible for all other costs related to acquisition of compensation lands and conservation easements, including but not limited to the title and document review costs incurred from other state agency reviews, overhead related to providing compensation lands to CDFG or an approved third party, escrow fees or costs, environmental contaminants clearance, and other site cleanup measures.

g. Management plan. The project owner shall ~~prepare~~ fund the development of a Management Plan for the compensation lands ~~in consultation with~~ for the entity that will be managing the lands. The Management Plan shall reflect site-specific enhancement measures on the acquired compensation lands. The plan shall be

submitted for approval of the CPM, in consultation with CDFG, BLM and USFWS.

h. Mitigation Security. The project owner shall provide financial assurances to the CPM, with copies of the final document to CDFG, to guarantee that an adequate level of funding is available to implement any of the mitigation measures required by this condition that are not completed prior to the start of ground-disturbing project activities. Financial assurances shall be provided to the CPM in the form of an irrevocable letter of credit, a pledged savings account or another form of security ("Security") approved by the CPM in consultation with CDFG. Prior to submitting the Security to the CPM, the project owner shall obtain the CPM's approval, in consultation with CDFG, of the form of the Security. The CPM may draw on the Security if the CPM determines the project owner has failed to comply with the requirements specified in this condition. The CPM may use money from the Security solely for implementation of the requirements of this condition, The CPM's use of the Security to implement measures in this condition may not fully satisfy the project owner's obligations under this condition. The Security shall be returned to the Project owner in whole or in part upon successful completion of the associated requirements in this condition.

Security shall be provided in the amount of ~~$9,386,637.37~~ $11,969,549.33 or (~~$10,434,538.75~~ $12,249,016.39 if the project owner elects to use the REAT Account with NFWF pursuant to paragraph 3.h. of this condition, below). The security is calculated in part, from the items that follow but adjusted as specified below (consult **Biological Resources Mitigation/Compensation Cost Estimate Table ~~5~~** for the complete breakdown of estimated costs):

i. land acquisition costs for compensation land, calculated at $500/acre = $3,309,950.00;

ii. initial protection and habitat improvement activities on the compensation land, calculated at $27/acre = $178,732.30;

iii. long-term maintenance and management on the compensation land calculated at $692/acre = $4,580,970.80;

iv. pre-acquisition liability survey at no less than ~~$2,500~~ $3,000 per parcel (assuming 40 acres per parcel) = ~~$413,743.75~~$498,000.00;

v. appraisal fees at ~~$3,000~~ $5,000 per parcel = ~~$458,908.50~~ $830,000.00;

vi. ~~BLM~~ Agency cost to accept land = ~~$765,415.07~~ $580,896.23 ~~(if BLM is determine to be most reasonable land manager); and~~

vii. NFWF fee = ~~$657,064.61~~ $279,467.06 (if NFWF is used for acquisition).

vii. Third-party administrative costs (estimated at 10% of land value) = $330,995.00

ix. Biological survey of compensation lands at $5,000 per parcel = $830,000.00

x. Initial site cleanup = $178,737.30

xi. Closing and escrow cost at $5,000 per parcel = $830,000.00

The amount of security shall be adjusted for any change in the project footprint as described above. In addition, the amount of Security specified in this section may be reduced in proportion to any of the secured mitigation requirements that the project owner has completed at the time the Security is required to be submitted. For example, if the project owner transfers funds for long-term management of the compensation lands to an entity approved to hold those funds, the Security would not include any amount for long-term maintenance and management of the lands. The project owner will be entitled to partial or complete release of the Security as the secured mitigation requirements are successfully completed.

i. The project owner may elect to comply with the requirements in this condition for acquisition of compensation lands, initial protection and habitat improvement on the compensation lands, or long-term maintenance and management of the compensation lands by funding, or any combination of these three requirements, by providing funds to implement those measures into the Renewable Energy Action Team (REAT) Account established with the National Fish and Wildlife Foundation (NFWF). To use this option, the

Project owner must make an initial deposit to the REAT Account in an amount equal to the estimated costs (as set forth in the Security section of this condition) of implementing the requirement. If the actual cost of the acquisition, initial protection and habitat improvements, or long-term funding is more than the estimated amount initially paid by the project owner, the project owner shall make an additional deposit into the REAT Account sufficient to cover the actual acquisition costs, the actual costs of initial protection and habitat improvement on the compensation lands, or the long-term funding requirements as established in an approved PAR or PAR-like analysis. If those actual costs or PAR projections are less than the amount initially transferred by the applicant, the remaining balance shall be returned to the project owner.

The responsibility for acquisition of compensation lands may be delegated to a third party other than NFWF, such as a non-governmental organization supportive of desert habitat conservation, by written agreement of the Energy Commission. Such delegation shall be subject to approval by the CPM, in consultation with CDFG, BLM and USFWS, prior to land acquisition, enhancement or management activities. Agreements to delegate land acquisition to an approved third party, or to manage compensation lands, shall be executed and implemented within 18 months of the Energy Commission's certification of the project.

4. The project owner may choose to satisfy its mitigation obligations indentified in this condition by paying an in-lieu fee instead of acquiring compensation lands, pursuant to Fish and Game code sections 2069 and 2099 or any other applicable in-lieu fee provision, to the extent the in-lieu fee provision is found by the Commission to be in compliance with CEQA and CESA requirements.

Verification: The project owner shall provide the CPM with written notice of intent to start ground disturbance at least 30 days prior to the start of ground-disturbing activities on the project site.

If the mitigation actions required under this condition are not completed at least 30 days prior to the start of ground-disturbing activities, the project owner shall provide the CPM with approved Security at least 30 days prior to the start of project ground-disturbing activities

No later than 12 months after the start of ground-disturbing project activities, the project owner shall submit a formal acquisition proposal to the CPM describing the parcels intended for purchase, and shall obtain approval from the CPM, in consultation with CDFG, BLM and USFWS, prior to the acquisition. If NFWF or another approved third party is handling the acquisition, the project owner shall fully cooperate with the third party to ensure the proposal is submitted within this time period. The project owner or an approved third party shall complete the acquisition and all required transfers of the compensation lands, and provide written verification to the CPM, CDFG, BLM and USFWS of such completion, no later than 18 months after the issuance of the Energy Commission Decision. If NFWF or another approved third party is being used for the acquisition, the project owner shall ensure that funds needed to accomplish the acquisition are transferred in timely manner to facilitate the planned acquisition and to ensure the land can be acquired and transferred prior to the 18-month deadline.

Draft agreements to delegate land acquisition to CDFG, BLM, or an approved third party and agreements to manage compensation lands shall be submitted to Energy Commission staff for review and approval (in consultation with CDFG) prior to land acquisition. Such agreements shall be mutually approved and executed at least 30 days prior to start of any project-related ground disturbance activities. The project owner shall provide written verification to the CPM that the compensation lands have been acquired and recorded in favor of the approved recipient(s). Alternatively, before beginning project ground-disturbing activities, the project owner shall provide Security in accordance with section 3.h of this condition. Within 180 days after the land purchase, as determined by the date on the title, the project owner shall provide the CPM with a management plan for review and approval, in consultation with CDFG, BLM, and USFWS, for the compensation lands and associated funds.

The project owner shall complete and submit to the CPM a PAR or PAR-like analysis no later than 60 days after the CPM approves compensation lands for acquisition. The project owner shall fully fund the required amount for long-term maintenance and management of the compensation lands no later than 30 days after the CPM approves a PAR or PAR-like analysis of the anticipated long-term maintenance and management costs of the compensation lands. Written verification shall be provided to the CPM and CDFG to confirm payment of the long-term maintenance and management funds.

No later than 60 days after the CPM determines what activities are required to provide for initial protection and habitat improvement on the compensation lands, the project owner shall make funding available for those activities and provide written verification to the CPM of what funds are available and how costs will be paid. Initial protection and habitat improvement activities on the compensation lands shall be completed, and written verification provided to the CPM, no later than six months after the CPM's determination of what activities are required on the compensation lands.

The project owner, or an approved third party, shall provide the CPM, CDFG, BLM and USFWS with a management plan for the compensation lands within180 days of the land or easement purchase, as determined by the date on the title. The CPM, in consultation

with CDFG, BLM and the USFWS, shall approve the management plan after its content is acceptable to the CPM.

Within 90 days after completion of all project related ground disturbance, the project owner shall provide to the CPM, CDFG, BLM and USFWS an analysis, based on aerial photography, with the final accounting of the amount of habitat disturbed during Project construction. This shall be the basis for the final number of acres required to be acquired.

If electing to satisfy the requirements of this condition by utilizing the options created by CDFG pursuant to SBX8 34, the Project owner shall notify the Commission that it would like a determination that the Project's in-lieu fee proposal meets CEQA and CESA requirements.

FLAT-TAILED HORNED LIZARD COMPLIANCE VERIFICATION

BIO-11 The project owner shall provide Energy Commission staff, BLM, CDFG, USFWS, and USACE representatives with reasonable access to the project site and compensation lands under the control of the project owner and shall otherwise fully cooperate with the Energy Commission staff, CDFG, USFWS, USACE, and BLM's efforts to verify the project owner's compliance with, or the effectiveness of, mitigation measures set forth in the conditions of certification. The project owner shall hold the Designated Biologist, the Energy Commission staff, CDFG, USFWS, USACE, and BLM harmless for any costs the project owner incurs in complying with the management measures, including stop work orders issued by the CPM, the BLM Biologist, or the Designated Biologist. The Designated Biologist shall do all of the following:

Notify the BLM Biologist and the CPM at least 14 calendar days before initiating ground-disturbing activities.

Immediately notify the BLM Biologist and the CPM in writing if the project owner is not in compliance with any conditions of certification, including but not limited to any actual or anticipated failure to implement mitigation measures within the time periods specified in the conditions of certification.

Remain onsite daily while grubbing and grading are taking place to avoid or minimize take of special status species, to check for compliance with all impact avoidance and minimization measures, and to check all FTHL clearance areas to ensure that signs, stakes, and fencing are intact and that human activities are restricted in these protective zones.

Conduct compliance inspections at a minimum of once per month after clearing, grubbing, and grading are completed and submit a monthly compliance report to the BLM Biologist, USFWS, CDFG and the CPM.

No later than January 31 of every year the project facility remains in operation, provide the CPM, BLM Biologist, USFWS, CDFG, and the FTHL ICC an annual FTHL Status Report, which shall include, at a minimum: 1) a general description of the status of the project site and construction activities, including actual or projected completion dates, if known; 2) a copy of the table in the BRMIMP with notes showing the current implementation status of each mitigation measure; 3) an assessment of the effectiveness of each completed or partially completed mitigation measure in minimizing and compensating for project impacts; 4) completed Horned Lizard Observation Data Sheet Sheets and a Project Reporting Form from the *Flat-tailed Horned Lizard Rangewide Management Strategy* (FTHL ICC 2003); 5) a summary of information regarding the numbers of captured, relocated, and dead FTHLs; and 6) other relevant information associated with the project.

Ensure that all observations of FTHL and their sign during construction project activities are reported to the Designated Biologist for inclusion in the next monthly compliance report submitted to the BLM Biologist and the CPM.

Should the Designated Biologist, in consultation with the BLM Biologist and the CPM, identify area(s) where the speed limit must be lowered on stabilized or paved roads due to FTHL occurrences, roadkill, and FTHL habitat quality, shall report these location(s) of reduced speed in the first monthly compliance report submitted to the BLM Biologist and the CPM following implementation of the speed limit change and installation of the signage.

No later than 45 days after the initial production of energy in the project's equipment, provide the BLM Biologist and the CPM a FTHL Mitigation Report that shall include, at a minimum: 1) a copy of the table in the BRMIMP with notes showing when each of the mitigation measures was implemented; 2) all available information about project-related incidental take of FTHLs; 3) information about other project impacts on the FTHL; 4) construction dates; 5) an assessment of the effectiveness of conditions of certification in minimizing and compensating for project impacts; 6) recommendations on how mitigation measures might be changed to more effectively minimize and mitigate the impacts of future projects on the FTHL; and 7) any other pertinent information, including the level of take of the FTHL associated with the project.

Any sightings of FTHLs during construction will be recorded per the conservations measures set forth by the USFWS Conferencing Opinion.

Verification: No later than two calendar days following the above required notification of a sighting, kill, or relocation of a listed species, the project owner shall deliver to the BLM Biologist, the CPM, CDFG, USACE, and USFWS via FAX or electronic communication the written report from the Designated Biologist describing all reported incidents of injury, kill, or relocation of a listed species, identifying who was notified, and explaining when the incidents occurred. In the case of a sighting in an active construction area, the project owner shall, at the same time, submit a map (e.g., using Geographic Information Systems) depicting both the limits of construction and sighting location to the BLM Biologist, the CPM, CDFG, USACE, and USFWS. Information regarding sightings, kills, or relocation of FTHLs will be summarized in monthly compliance reports per conditions of **BIO-9.**

LAKE AND STREAMBED AND PENINSULAR BIGHORN SHEEP FORAGING HABITAT IMPACT MINIMIZATION AND COMPENSATION MEASURES

BIO-17 The project owner is required to compensate for the loss of 881 acres of ephemeral wash foraging habitat for the Peninsular bighorn sheep (PBHS), as well as the functional loss of 48 acres of state jurisdictional waters. Mitigation presented within this proposed Condition of Certification is designed to mitigate for impacts resulting from implementation of Drainage Avoidance #1 Alternative, This alternative substantially reduces impacts to state jurisdictional waters and waters of the U.S. Further review and possible revision of compensation land acreage requirements will be necessary following determination of the final project footprint and impacts. The acquisition of jurisdictional state waters can be included with the FTHL, burrowing owl, golden eagle, American badger, and desert kit fox mitigation lands (**BIO-10**) if they are acquired within 18 months of start of construction. If FTHL habitat mitigation lands are not acquired within 18 months, the project owner shall independently provide 48 acres of off-site desert ephemeral wash habitat.

If all or any portion of the acquired habitat compensation lands from **BIO-10** meets the criteria for bighorn sheep foraging habitat and state waters compensation lands, then the requirements of **BIO-17** are reduced by that amount.

Although the criteria for ephemeral wash foraging habitat and waters of the state habitat are listed separately below, the compensation lands acquired pursuant to this conditions must meet both sets of criteria.

1. Selection Criteria for Compensation Lands: Land selected as compensation for loss of ephemeral wash PBHS foraging habitat must satisfy the following criteria;
    a. Be within the "Essential Habitat Line" for PBHS, as delineated by the USFWS Recovery Plan for Bighorn Sheep in the Peninsular Ranges, California (USFWS 2000). If sufficient available suitable habitat is not found within the Essential Habitat Line, then habitat immediately adjacent to the Essential Habitat Line must be purchased, and also of equal or higher quality habitat than present within the project site.
    b. Be comprised of the same or higher quality habitat of demonstrated known utilization by PBHS as forage, and selected in conjunction with input from CDFG and the USFWS.

Land selected as compensation for impacts to state jurisdictional waters must satisfy the following criteria:

c. Compensation land purchased in Sonoran creosote scrub habitat must include ephemeral washes with at least 48 acres of state jurisdictional waters, mitigated at a 1:1 ratio.
d. Be characterized by similar soil permeability, hydrological and biological functions as the impacted drainages.
e. Located in the Colorado Desert.

2. Review and Approval of Compensation Lands Prior to Acquisition: The Project owner shall submit a formal acquisition proposal to the CPM describing the parcel(s) intended for purchase. This acquisition proposal shall discuss the suitability of the proposed parcel(s) as compensation lands for FTHL in relation to the criteria listed above, and must be approved by the CPM. The CPM will share the proposal with and consult with CDFG, BLM, and the USFWS before deciding whether to approve or disapprove the proposed acquisition.

3. Compensation Lands Acquisition Requirements: The project owner shall comply with the following requirements relating to acquisition of the compensation lands after the CPM, in consultation with CDFG, BLM, and the USFWS, has approved the proposed compensation lands:

   a. Preliminary Report. The Project owner, or approved third party, shall provide a recent preliminary title report, initial hazardous materials survey report, biological analysis, and other necessary or requested documents for the proposed compensation land to the CPM. All documents conveying or conserving compensation lands and all conditions of title are subject to review and approval by the CPM, in consultation with CDFG, BLM and the USFWS. For conveyances to the State, approval may also be required from the California Department of General Services, the Fish and Game Commission and the Wildlife Conservation Board.

   b. Title/Conveyance. The Project owner shall acquire and transfer fee title to the compensation lands, a conservation easement over the lands, or both fee title and conservation easement, as required by the CPM in consultation with CDFG. Any transfer of a conservation easement or fee title must be to CDFG, a non-profit organization qualified to hold title to and manage compensation lands (pursuant to California Government Code section 65965), or to BLM or other public agency approved by the CPM in consultation with CDFG. If an approved non-profit organization holds fee title to the compensation lands, a conservation easement shall be recorded in favor of CDFG or another entity approved by the CPM. If an entity other than CDFG holds a conservation easement over the compensation lands, the CPM may require that CDFG or another entity approved by the CPM, in consultation with CDFG, be named a third party beneficiary of the conservation easement. The Project owner shall obtain approval of the CPM, in consultation with CDFG, of the terms of any transfer of fee title or conservation easement to the compensation lands.

c. Initial Protection and Habitat Improvement. The project owner shall fund activities that the CPM, in consultation with the CDFG, USFWS and BLM, requires for the initial protection and habitat improvement of the compensation lands. These activities will vary depending on the condition and location of the land acquired, but may include trash removal, construction and repair of fences, invasive plant removal, and similar measures to protect habitat and improve habitat quality on the compensation lands. The costs of these activities are estimated at $27 an acre, but will vary depending on the measures that are required for the compensation lands. A non-profit organization, CDFG or another public agency may hold and expend the habitat improvement funds if it is qualified to manage the compensation lands (pursuant to California Government Code section 65965), if it meets the approval of the CPM in consultation with CDFG, and if it is authorized to participate in implementing the required activities on the compensation lands. If CDFG takes fee title to the compensation lands, the habitat improvement fund must be paid to CDFG or its designee.

d. Property Analysis Record. Upon identification of the compensation lands, the Project owner shall conduct a Property Analysis Record (PAR) or PAR-like analysis to establish the appropriate amount of the long-term maintenance and management fund to pay the in-perpetuity management of the compensation lands. The PAR or PAR-like analysis must be approved by the CPM, in consultation with CDFG, before it can be used to establish funding levels or management activities for the compensation lands.

e. Long-term Maintenance and Management Funding. The Project owner shall provide money to establish an account with non-wasting capital that will be used to fund the long-term maintenance and management of the compensation lands. The amount of money to be paid will be determined through an approved PAR or PAR-like analysis conducted for the compensation lands. The amount of required funding is initially estimated to be $692 for every acre of compensation lands. If compensation lands will not be identified and a PAR or PAR-like analysis completed within the time period specified for this payment (see the verification section at the end of this condition), the Project owner shall either provide initial payment of $609,652 (calculated at $692 an acre for 881 acres) or the project owner shall include $609,652 to reflect this amount in the security that is provided to the Energy Commission under section 3.h. of this condition. The amount of the required initial payment or security for this item shall be adjusted for any change in the project footprint as described above. If an initial payment is made based on the estimated per-acre costs, the project owner shall deposit additional money as may be needed to provide the full amount of long-term maintenance and management funding indicated by a PAR or PAR-like analysis, once the analysis is completed and approved.

If the approved analysis indicates less than $692 an acre will be required for long-term maintenance and management, the excess paid will be returned to the project owner. The project owner must obtain the CPM's approval of the entity that will receive and hold the long-term maintenance and management fund for the compensation lands. The CPM will consult with CDFG before deciding whether to approve an entity to hold the project's long-term maintenance and management funds.

The project owner shall ensure that an agreement is in place with the long-term maintenance and management fund holder/manager to ensure the following requirements are met:

i. Interest. Interest generated from the initial capital long-term maintenance and management fund shall be available for reinvestment into the principal and for the long-term operation, management, and protection of the approved compensation lands, including reasonable administrative overhead, biological monitoring, improvements to carrying capacity, law enforcement measures, and any other action that is approved by the CPM in consultation with CDFG and is designed to protect or improve the habitat values of the compensation lands.

ii. Withdrawal of Principal. The long-term maintenance and management fund principal shall not be drawn upon unless such withdrawal is deemed necessary by the CPM, in consultation with CDFG, or by the approved third-party long-term maintenance and management fund manager, to ensure the continued viability of the species on the compensation lands.

iii. Pooling Long-Term Maintenance and Management Funds. An entity approved to hold long-term maintenance and management funds for the Project may pool those funds with similar non-wasting funds that it holds from other projects for long-term maintenance and management of compensation lands for local populations of ~~desert tortoise~~FTHL. However, for reporting purposes, the long-term maintenance and management funds for this Project must be tracked and reported individually to the CPM and CDFG.

f. Other Expenses. In addition to the costs listed above, the project owner shall be responsible for all other costs related to acquisition of compensation lands and conservation easements, including but not limited to the title and document review costs incurred from other state agency

reviews, overhead related to providing compensation lands to CDFG or an approved third party, escrow fees or costs, environmental contaminants clearance, and other site cleanup measures.

g. Management Plan. The project owner shall ~~prepare~~ fund the development of a Management Plan for the compensation lands ~~in consultation with~~ for the entity that will be managing the lands. The Management Plan shall reflect site-specific enhancement measures for the drainages on the acquired compensation lands. The objective of the Management Plan shall be to enhance the wildlife value of the drainages and may include enhancement actions such as weed control, fencing to exclude livestock and OHVs, or erosion control. The plan shall be submitted for approval of the CPM, in consultation with CDFG, BLM and USFWS.

h. Mitigation Security. The project owner shall provide financial assurances to the CPM, with copies of the final document to CDFG, to guarantee that an adequate level of funding is available to implement any of the mitigation measures required by this condition that are not completed prior to the start of ground-disturbing project activities. Financial assurances shall be provided to the CPM in the form of an irrevocable letter of credit, a pledged savings account or another form of security ("Security") approved by the CPM in consultation with CDFG. Prior to submitting the Security to the CPM, the project owner shall obtain the CPM's approval, in consultation with CDFG, of the form of the Security. The CPM may draw on the Security if the CPM determines the project owner has failed to comply with the requirements specified in this condition. The CPM may use money from the Security solely for implementation of the requirements of this condition, The CPM's use of the Security to implement measures in this condition may not fully satisfy the project owner's obligations under this condition. The Security shall be returned to the Project owner in whole or in part upon successful completion of the associated requirements in this condition.

Security shall be provided in the amount of ~~$1,297,656.86~~ $1,609,296.75 or (~~$1,388,492.84~~ $1,645,382.61 if the project owner elects to use the REAT Account with NFWF pursuant to paragraph 3.h. of this condition, below). The security is calculated in part, from the items that follow but adjusted as specified below (consult **Biological Resources Mitigation/Compensation Cost Estimate Table ~~5~~** for the calculation of estimated costs):

i. land acquisition costs for compensation land, calculated at $500/acre x 881 acres = $440,500;

ii. initial protection and habitat improvement activities on the compensation land, calculated at $27/acre x 881 acres = $23,787;

iii. long-term maintenance and management on the compensation land calculated at $692/acre x 881 acres = $609,652;

iv. pre-acquisition liability survey at no less than ~~$2,500~~ $3,000 per parcel (assuming 40 acres per parcel = 23 parcels): = $69,000;

~~(No. of parcels = 881 acres : 40 acres = 22 parcels)~~

~~22 parcels x $2500 = $55,000;~~

v. appraisal fees at ~~$3,000~~ $5,000 per parcel = ~~$66,000~~ $115,000;

vi. Agency ~~BLM~~ cost to accept land calculated at (land cost x 15%) x 1.17 (17% of the 15% for overhead) = ~~$102,717.86~~ $77,307.75; ~~(if BLM is determine to be most reasonable land manager); and~~

vii. Closing and escrow cost at $5,000 per parcel = $115,000;

viii. Third party administrative costs (land cost x 10%) = $44,050;

ix. Biological survey for determining mitigation value of land at $5,000 per parcel = $115,000; and

x. NFWF fee = ~~$90,835.98~~ $36,085.86 (if NFWF is used for acquisition).

The amount of security shall be adjusted for any change in the project footprint as described above. In addition, the amount of Security specified in this section may be reduced in proportion to any of the secured mitigation requirements that the project owner has completed at the time the Security is required to be submitted. If all or any portion of required habitat compensation lands from **BIO-10** and **BIO-17** meets the criteria set forth for special status compensation lands may be used to fulfill that portion of the obligation for this condition, thus reducing the compensation acreage amount needed to fulfill the needed 881 acres. Also, if the project owner transfers funds for long-term management of the compensation lands to an entity approved to hold those funds, the Security would not include any amount for long-term maintenance and management of the lands. The project owner will be entitled to partial or complete release of the Security as the secured mitigation requirements are successfully completed.

i. The project owner may elect to comply with the requirements in this condition for acquisition of compensation lands, initial protection and habitat improvement on the compensation lands, or long-term

maintenance and management of the compensation lands by funding, or any combination of these three requirements, by providing funds to implement those measures into the Renewable Energy Action Team (REAT) Account established with the National Fish and Wildlife Foundation (NFWF). To use this option, the Project owner must make an initial deposit to the REAT Account in an amount equal to the estimated costs (as set forth in the Security section of this condition) of implementing the requirement. If the actual cost of the acquisition, initial protection and habitat improvements, or long-term funding is more than the estimated amount initially paid by the project owner, the project owner shall make an additional deposit into the REAT Account sufficient to cover the actual acquisition costs, the actual costs of initial protection and habitat improvement on the compensation lands, or the long-term funding requirements as established in an approved PAR or PAR-like analysis. If those actual costs or PAR projections are less than the amount initially transferred by the applicant, the remaining balance shall be returned to the project owner.

The responsibility for acquisition of compensation lands may be delegated to a third party other than NFWF, such as a non-governmental organization supportive of desert habitat conservation, by written agreement of the Energy Commission. Such delegation shall be subject to approval by the CPM, in consultation with CDFG, BLM and USFWS, prior to land acquisition, enhancement or management activities. Agreements to delegate land acquisition to an approved third party, or to manage compensation lands, shall be executed and implemented within 18 months of the Energy Commission's certification of the project.

4. The project owner may choose to satisfy its mitigation obligations identified in this condition by paying an in lieu fee instead of acquiring compensation lands, pursuant to Fish and Game code sections 2069 and 2099 or any other applicable in-lieu fee provision, to the extent the in-lieu fee provision is found by the Commission to be in compliance with CEQA and CESA requirements.

5. Notification. The project owner shall notify the CPM and CDFG in writing, at least five days prior to initiation of project activities in jurisdictional areas as noted and at least five days prior to completion of project activities in jurisdictional areas. The project owner shall notify the CPM and CDFG of any change of conditions to the project, the jurisdictional impacts, or the mitigation efforts, if the conditions at the site of a proposed project change in a manner which changes risk to biological resources that may be substantially adversely affected by the proposed project. The notifying report shall be provided to the CPM and CDFG no later than seven days after the change of conditions is identified. As used here, change of condition refers to the process, procedures, and methods of operation of a project; the biological and physical characteristics of a project area; or the laws or regulations pertinent to the project as defined below. A copy of the notifying change of conditions report shall be included in the annual reports.

- Biological Conditions: a change in biological conditions includes, but is not limited to, the following: 1) the presence of biological resources within or adjacent to the project area, whether native or non-native, not previously known to occur in the area; or 2) the presence of biological resources within or adjacent to the project area, whether native or non-native, the status of which has changed to endangered, rare, or threatened, as defined in section 15380 of Title 14 of the California Code of Regulations.

- Physical Conditions: a change in physical conditions includes, but is not limited to, the following: 1) a change in the morphology of a river, stream, or lake, such as the lowering of a bed or scouring of a bank, or changes in stream form and configuration caused by storm events; 2) the movement of a river or stream channel to a different location; 3) a reduction of or other change in vegetation on the bed, channel, or bank of a drainage, or 4) changes to the hydrologic regime such as fluctuations in the timing or volume of water flows in a river or stream.

- Legal Conditions: a change in legal conditions includes, but is not limited to, a change in Regulations, Statutory Law, a Judicial or Court decision, or the listing of a species, the status of which has changed to endangered, rare, or threatened, as defined in section 15380 of Title 14 of the California.

6. Lake and Streambed Impact Minimization and Compensation Measures. The project owner shall provide a copy of Condition of Certification **BIO-17** from the Energy Commission Decision to all contractors, subcontractors, and the Applicant's project supervisors. Copies shall be readily available at work sites at all times during periods of active work and must be presented to any CDFG personnel or personnel from another agency upon demand. The CPM reserves the right to issue a stop work order or allow CDFG to issue a stop work order after giving notice to the project owner and the CPM, if the CPM in consultation with CDFG, determines that the project owner has breached any of the terms or conditions or for other reasons, including but not limited to the following:

    - The information provided by the applicant regarding streambed alteration is incomplete or inaccurate;

    - New information becomes available that was not known to it in preparing the terms and conditions;

    - The project or project activities as described in the SAA have changed; or

- The conditions affecting biological resources changed or the CPM or BLM Biologist, in consultation with CDFG or USACE, determines that project activities would result in a substantial adverse effect on the environment.

Should project conditions change and impacts to bed, bank, or channel occur on any of the water ways along the reclaimed water pipeline route, a revised Lake and Streambed Alteration Agreement (LSAA) application must be submitted to the Commission in consultation with CDFG either (1) for a Commission determination that the revised LSAA application complies with CEQA and CESA; or (2) should the project conditions change after a final decision in on the AFC in this proceeding, through an application for amendment to the Commission's final decision issued in this proceeding.

Verification: No later than 12 months after the start of ground-disturbing project activities, the project owner, or a third-party approved by the CPM, in consultation with CDFG and BLM, shall submit a formal acquisition proposal to the CPM describing the parcel(s) intended for purchase containing no less than 48 acres of state jurisdictional waters and 881 acres of applicable PBHS foraging habitat, and shall obtain approval from the CPM, in consultation with CDFG, BLM, and USFWS, prior to acquisition.

Draft agreements to delegate land acquisition to CDFG, BLM, or an approved third party and agreements to manage compensation lands shall be submitted to Energy Commission staff for review and approval (in consultation with CDFG) prior to land acquisition. Such agreements shall be mutually approved and executed at least 30 days prior to start of any project-related ground disturbance activities. The project owner shall provide written verification to the CPM that the compensation lands have been acquired and recorded in favor of the approved recipient(s). Alternatively, before beginning project ground-disturbing activities, the project owner shall provide Security in accordance with section 3.h of this condition. Within 180 days after the land purchase, as determined by the date on the title, the project owner shall provide the CPM with a management plan for review and approval, in consultation with CDFG, BLM, and USFWS, for the compensation lands and associated funds.

The project owner shall complete and submit to the CPM a PAR or PAR-like analysis no later than 60 days after the CPM approves compensation lands for acquisition. The project owner shall fully fund the required amount for long-term maintenance and management of the compensation lands no later than 30 days after the CPM approves a PAR or PAR-like analysis of the anticipated long-term maintenance and management costs of the compensation lands. Written verification shall be provided to the CPM and CDFG to confirm payment of the long-term maintenance and management funds.

No later than 60 days after the CPM determines what activities are required to provide for initial protection and habitat improvement on the compensation lands, the project owner shall make funding available for those activities and provide written verification to the CPM of what funds are available and how costs will be paid. Initial protection and habitat improvement activities on the compensation lands shall be completed, and written verification provided to the CPM, no later than six months after the CPM's determination of what activities are required on the compensation lands.

If electing to satisfy the requirements of this condition by utilizing the options created by CDFG pursuant to SBX8 34, the Project owner shall notify the Commission that it would like a determination that the Project's in-lieu fee proposal meets CEQA and CESA requirements.

No fewer than 30 days prior to the start of work potentially affecting jurisdictional state waters, the project owner shall provide written verification (i.e., through incorporation into the BRMIMP) to the CPM that the above best management practices will be implemented and provide a discussion of work in jurisdictional state waters in Compliance Reports for the duration of the project.

SPECIAL STATUS PLANT SURVEYS AND PROTECTION PLAN

BIO-19 This condition contains the following four sections:

- **Section A: Special-Status Plant Impact Avoidance and Minimization Measures** contains the Best Management Practices and other measures designed to avoid accidental impacts to plants occurring outside of the Project Disturbance Area and within 100 feet of the Project Disturbance Area during construction, operation, and closure.
- **Section B: Conduct Late Season Botanical Surveys** describes guidelines for conducting summer-fall 2010 surveys to detect special-status plants that would have been missed during the spring 2010 surveys.
- **Section C: Avoidance Requirements for Special-Status Plants** Detected **in the Summer/Fall 2010 Surveys** outlines the level of avoidance required for plants detected during the summer-fall surveys, based on the species' rarity and status codes.
- **Section D: Off-Site Compensatory Mitigation for Special-Status Plants** describes performance standards for mitigation for a range of options for compensatory mitigation through acquisition, restoration/enhancement, or a combination of acquisition and restoration/enhancement.

"Project Disturbance Area" encompasses all areas to be temporarily and permanently disturbed by the Project, including the plant site, linear facilities, and areas disturbed by temporary access roads, fence installation, construction work lay-down and staging areas, parking, storage, or by any other activities resulting in disturbance to soil or vegetation.

The Project owner shall implement the following measures in Section A, B, C, and D to avoid, minimize, and compensate for impacts to special-status plant species:

~~**BIO-19** The Project owner shall implement the following measures to avoid, minimize, and mitigate impacts to special status plant species:~~

Section A: Special Status Plant Avoidance and Minimization Measures

To protect all special status plants[2] located outside of the Project Disturbance Area and within 100 feet of the permitted Project Disturbance Area (including access roads, staging areas, laydown areas, parking and storage areas) from accidental and indirect impacts during construction, operation, and closure, the Project owner shall implement the following measures:

1. Designated Botanist. An experienced botanist who meets the qualifications described in Section **B-2** below shall oversee compliance with all special-status plant avoidance, minimization, and compensation measures described in this condition throughout construction, operation, and closure. The Designated Botanist shall oversee and train all other Biological Monitors tasked with conducting botanical survey and monitoring work. During operation of the project, the Designated Biologist shall be responsible for protecting special status plant occurrences within 100 feet of the project boundaries.
2. Special Status Plant Impact Avoidance and Minimization Plan. The project owner shall develop and implement a Special Status Plant Impact Avoidance and Minimization Plan and shall incorporate the Plan into the BRMIMP (**BIO-7**). The Plan shall include the following elements:
    a. Site Design Modifications: Incorporate site design modifications to minimize impacts to special-status plants along the Project linears: limiting the width of the work area; adjusting the location of staging areas, lay downs, spur roads and poles or towers; driving and crushing vegetation as an alternative to blading temporary roads to preserve the seed bank, and minor adjustments to the alignment of the roads and pipelines within the constraints of the right-of-way (ROW). These modifications shall be clearly depicted on the grading and construction plans, and on report-sized maps in the BRMIMP;
    b. Establish Environmentally Sensitive Areas (ESAs). Before construction, the Designated Botanist shall establish ESAs to protect avoided special status plants that occur outside of the Project Disturbance Areas and within 100 feet of Project Disturbance Areas. This includes plant occurrences identified during the spring 2010 surveys and the late season 2010 surveys. The locations of ESAs shall be clearly depicted on construction

[2] Staff defines special-status plants as described in *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (California Natural Resources Agency, Department of Fish and Game, issued November 24, 2009.

drawings, which shall also include all avoidance and minimization measures on the margins of the construction plans. The boundaries of the ESAs shall be placed a minimum of 20 feet from the uphill side of the occurrence and 10 feet from the downhill side. Where this is not possible due to construction constraints, other protection measures, such as silt-fencing and signs prohibiting movement of the fencing or sediment controls, may be employed to protect the occurrences~~, and~~. ESAs shall be clearly delineated in the field with temporary construction fencing and signs prohibiting movement of the fence under penalty of work stoppages and additional compensatory mitigation. ESAs shall also be ~~permanently marked~~clearly identified (with signage or other markers) to ensure that avoided plants are not inadvertently harmed during construction, operation, or closure.

c. Special-Status Plant Worker Environmental Awareness Program (WEAP). The Plan shall include training components specific to protection of special-status plants, and shall be incorporated into the WEAP described in **BIO-6**;

d. Herbicide and Soil Stabilizer Drift Control Measures. The Plan shall provide detailed specifications for avoiding herbicide and soil stabilizer drift, and shall include a list of herbicides and soil stabilizers that will be used on the Project with manufacturer's guidance on appropriate use. The Plan shall Indicate where the herbicides will be used, and what techniques will be used to avoid chemical drift or residual toxicity to special-status plants, consistent with guidelines provided by the Nature Conservancy's *The Global Invasive Species Team*[3] , the U.S. Environmental Protection Agency, and the Pesticide Action Network Database[4]. ~~<http://www.invasive.org/gist/products.html>~~

e. Erosion and Sediment Control Measures. The Plan shall include measures to ensure that erosion and sediment control measures do not inadvertently impact special-status plants (e.g., by using invasive or non-native plants in seed mixes, introducing pest plants through contaminated seed or straw, etc.). These measures shall be incorporated in the Storm Water Pollution Prevention Plan.

f. Avoid Special-Status Plant Occurrences. Designate spoil areas; equipment, vehicle, and materials storage areas; parking;

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[3] Hillmer, J. & D. Liedtke. 2003. Safe herbicide handling: a guide for land stewards and volunteer stewards. Ohio Chapter, The Nature Conservancy, Dublin, OH. 200 pp. Online: <http://www.invasive.org/gist/products.html.

[4] Pesticide Action Network of North America. Kegley, S.E., Hill, B.R., Orme, S., Choi, A.H., 2010. PAN Pesticide Database, Pesticide Action Network, North America. San Francisco, CA. Online: <http://www.pesticideinfo.org>

equipment and vehicle maintenance areas, and; wash areas at least 100 feet from any ESAs.

~~g.~~ Monitoring and Reporting Requirements. The Designated Botanist shall conduct weekly monitoring of the ESAs that protect special-status plant occurrences during construction~~, operation, or~~ and decommissioning activities within 100 feet of the occurrences, and quarterly monitoring ~~for the remainder of construction~~during operations. The Project owner shall also conduct annual monitoring of the avoided occurrences on-site, and off-site occurrences that are adjacent to the Project, for the life of the Project (see Verification, below).

~~h. Seed Collection. Conduct pre-construction collection of seed (or other propagules) of the affected special-status plants within the Project Disturbance Area in the summer-fall season prior to the start of construction and according to the seed collection and storage guidelines contained in (Wall 2009a; Bainbridge 2007). Collection of seed (or other propagules) shall be done by the Rancho Santa Ana Botanic Garden (RSABG) Conservation Program staff or other qualified seed or restoration specialist. The Project owner shall be responsible for all costs associated with seed storage All seed storage shall occur at RSABG or other qualified seed dealer and at least 40 percent of the collected seed shall remain in long-term storage at RSABG Seed Conservation Program, San Diego Natural History Museum, or other qualified seed conservation program, and made available for contingency efforts in the event of on-site or off-site mitigation failure.~~

Section B: Conduct Late-Season Botanical Surveys

The Project owner shall conduct late-summer/fall botanical surveys for late-season special-status plants as described below:

1. Survey Timing. Surveys shall be timed to detect~~: a)~~ summer annuals triggered to germinate by the warm, tropical summer storms (which may occur any time between June and October).~~, and b)~~ ~~f~~Fall-blooming perennials that respond to the cooler, later season storms that originate in the Pacific northwest (typically beginning in September or October) shall only be required if blooms and seeds are necessary for identification or the species are summer-deciduous and require leaves for identification. The surveys shall not be timed to coincide with the statistical peak bloom period of the target species but shall instead be based on plant phenology and the timing of a significant storm event (i.e., a 10mm or greater rain or multiple storm events of sufficient volume to trigger germination, as measured at or within 1 mile of the Project site). Surveys ~~for summer annuals shall be timed to occur approximately 4 to 7 weeks following a~~

~~warm, tropical storm. Re-surveys~~ shall occur ~~as many times as necessary to ensure that surveys are conducted during~~ at the appropriate time to capture the characteristics necessary to identify ~~identification period for the target taxa, which may be blooms, fruit, seed characteristics, or vegetative characteristics, depending on~~ the taxon.

2. Surveyor Qualifications and Training. Surveys shall be conducted by a qualified botanist knowledgeable in the complex biology of the local flora, and consistent with CDFG protocols (CDFG 2009). The botanical survey crew shall be prepared to mobilize quickly to conduct appropriately timed surveys. Each surveyor shall be equipped with a GPS unit and record a complete tracklog; these data shall be compiled and submitted along with the Summer-Fall Survey Botanical Report (described below). Prior to the start of surveys, all crew members shall, at a minimum, visit reference sites (where available) and/or review herbarium specimens of all BLM Sensitive plants, CNPS List 1B or 2 (Nature Serve rank S1 and S2) or proposed List 1B or 2 taxa, and any new reported or documented taxa, to obtain a search image. Because the potential for range extensions ~~are likely to be found~~is unknown, the list of potentially occurring special-status plants shall include all special-status taxa known to occur within the Sonoran Desert region in California. The list shall also include taxa with bloom seasons that begin in fall and extend into the early spring as many of these are reported to be easier to detect in fall, following the start of the fall rains.

3. Survey Coverage.

   a) Survey protocol utilized for the 2010 late spring surveys for the project site could be utilized for summer/fall botanical surveys (see **Methods** section of the URS report titled "Imperial Valley Solar (formerly Solar Two) (08-AFC-5) Applicant's Submittal of Late Spring Botany Report, URS Project No. 27657106.00804", dated June 11, 2010; **or** the project owner can do the following:

   b) The survey coverage or intensity shall be in accordance with BLM Survey Protocols (issued July 2009), which specify that intuitive controlled surveys shall only be accomplished by botanists familiar with the habitats and species that may reasonably be expected to occur in the project area. ~~At a minimum, the Applicant shall conduct comprehensive surveys (i.e., 100 percent visual coverage) of the washes, and other lowlands within the Project Disturbance Area to capture the full extent of the washes that will be affected by development in the washes. In the intervening uplands (dry areas), surveys shall be conducted to ensure a 25 percent visual coverage. Other special or unique habitats associated with rare plants shall also be surveyed at 100 percent visual coverage. Transects shall be "intuitive controlled" (per Whitaker et al. 1998) to ensure a~~

~~focus on habitat most likely to support rare plants (such as desert washes), rather than on pre-defined, evenly-spaced survey grids. In the one-mile Energy Commission buffer areas (outside the Project Disturbance Area), washes and other habitats strongly associated with rare plants shall also be surveyed comprehensively (i.e., 100 percent visual coverage) if they will be affected by development in the washes, but the intervening uplands or habitat not strongly associated with rare plants may be spot-checked or sampled at approximately 10 percent visual coverage.~~

4. Documenting Occurrences. If a special-status plant is detected, the full extent of the population ~~shall be assessed, both~~ onsite shall be recorded using GPS in accordance with BLM survey protocols~~and offsite~~. Additionally, the extent of the population within one mile of project boundaries shall be assessed at least qualitatively to facilitate an accurate estimation of the proportion of the population affected by the project. For populations that are very dense or very large, the population size may be estimated by simple sampling techniques. When populations are very extensive or locally abundant, the survey must provide some basis for this assertion and roughly map the extent on a topographic map. ~~The number of individuals shall be counted (or sub-sampled and the population size estimated in the event of large populations). The boundaries of all occurrences shall be recorded with hand-held GPS units of one meter or better accuracy and then plotted on aerial photo base maps of a scale similar to that used in the AFC (SES 2008a).~~ All but the smallest populations (e.g., a population occupying less than 100 square feet) shall be recorded as area polygons; small populations may be recorded as point features. All GPS-recorded occurrences shall include: the number of plants, phenology, observed threats (e.g., OHV or invasive exotics), and habitat or community type. The map of occurrences submitted with the ~~progress reports and~~ final botanical report shall be prepared to ensure consistency with ~~mapping protocol and~~ definition~~s~~ of an occurrence~~s~~ ~~in~~ by CNDDB~~:~~, i.e., occurrences found within 0.25 miles of another occurrence of the same taxon, and not separated by significant habitat discontinuities, shall be combined into a single 'occurrence'. The project owner shall also submit the raw GPS shape files and metadata, and completed CNDDB forms for each 'occurrence' (as defined by CNDDB).

5. Reporting. Raw GPS data, metadata, and CNDDB field forms shall be provided to the CPM within two weeks of the completion of each survey. If surveys are split into two or more periods (e.g., a late summer survey and a fall survey), then a summary letter shall be submitted following each survey period~~Progress Reports shall be submitted during surveys (as described below in verification), and shall include: a) the raw GPS data and metadata; b) a spreadsheet of the data (from the 'dbf' file), and c) a map of the data showing occurrence locations (labeled with their~~

~~corresponding occurrence number from the GPS files) and Project features on a USGS topographic base map~~.

The Final Summer-Fall Botanical Survey Report shall be prepared consistent with CDFG guidelines (CDFG 2009), and BLM guidelines ~~(Lund pers comm)~~ and shall include the following components:

a. the BLM designation, NatureServe Global and State Rank of each species or taxon found (or proposed rank, or CNPS List);

b. the number or percent of the occurrence that will be directly affected, and indirectly affected by changes in drainage patterns or altered geomorphic processes;

c. the habitat or plant community that supports the occurrence and the total acres of that habitat or community type that occurs in the Project Disturbance Area;

d. an indication of whether the occurrence has any local or regional significance (e.g., if it exhibits any unusual morphology, occurs at the periphery of its range in California, represents a significant range extension or disjunct occurrence, or occurs in an atypical habitat or substrate);

e. a completed CNDDB field form for every occurrence (occurrences of the same species within 0.25 mile or less of each other combined as one occurrence, consistent with CNDDB methodology), and;

f. two maps: one that depicts the raw GPS data (as collected in the field) on a topographic base map with Project features; and a second map that follows the CNDDB protocol for occurrence mapping~~, which lumps two or more occurrences of the same species within one-quarter mile or less of each other into one occurrence~~.

Section C: Avoidance Requirements~~Triggers for Implementation of Mitigation~~ for Special-Status Plants Detected in the Summer/Fall 2010 Surveys

The project owner shall apply the following avoidance standards ~~listed below establish criteria that would trigger implementation of additional mitigation measures for impacts~~ to late blooming special status plant species that might be detected during late summer/fall season ~~special status plant species (if detected during the~~ surveys ~~required under Section B of this Condition)~~. ~~These~~ Avoidance and/or the mitigation measures~~,~~ described in Section D below~~,~~ would reduce impacts to any special-status plant species detected during the late summer/fall plant surveys to less than significant levels. ~~These rankings are based on the internationally accepted Natural Heritage Methodology, available online at: http://www.natureserve.org/prodServices/heritagemethodology.jsp Included in this methodology is the NatureServe global and state ranking process (www.natureserve.org/explorer/ranking) which provides an estimate of extinction risk worldwide and in California (Master et al. 2009). Avoidance and Minimization Measures described in Section A of this condition are required for all special-status plants, regardless of NatureServe rank or CNPS List.~~

1. Mitigation for CNDDB Rank 1 Plants (Critically Imperiled) – Avoidance Required:~~Triggers. The following triggers for implementation of mitigation are not intended for use beyond their use in the application of this Condition (Subsection C):~~ If late blooming species with a CNDDB rank of 1 are detected within the Project Disturbance Area, the project owner shall prepare and implement a Special Status Plant Mitigation Plan (Plan). The goal of the Plan shall be to retain at least 75 percent of the local population of the affected species. Compensatory mitigation, as described in Section D of this condition, and at a mitigation ratio of 3:1, shall be required for the 25 percent or portion that is not avoided. The Plan shall include at a minimum, the following components and definitions:

    a. A description of the occurrences of the CNDDB rank 1 species on and off the project site, the percent of the local population affected, and a description of how these occurrences would be impacted by the project, including direct and indirect effects. The local population shall be measured by the number of individuals occurring on the project site and within the local watershed of the project for wash-dependent species or species of unknown dispersal mechanism. Occurrences shall be considered impacted if they are within the project footprint or if they would be affected by project-related hydrologic changes. ~~Level 1 Trigger. BLM requests 100 percent avoidance for BLM Sensitive species (CNPS List 1 species are BLM Sensitive) but BLM's State Botanist will decide the level of avoidance on a case-by-case basis. Any impacts to non-BLM Sensitive species with a NatureServe Global Rank of G1 or G2 will trigger mitigation as described in Section D below.~~

b. A description of the avoidance and minimization measures that would achieve complete avoidance of occurrences on the project linears and construction laydown areas, unless such avoidance would cause disturbance to areas not previously surveyed for biological resources.~~Level 2 Trigger. Any impact to a CNPS List 2 taxon will trigger mitigation described in Section D below. However, should a CNPS List 3 or 4 taxon be of local or regional significance, as described below in 2b, then the level of protection for the taxon shall be adjusted~~

c. A description of how avoidance and minimization measures would be implemented on the project solar facility, with the requirement of retaining at least 75 percent of the local population of this species. Compensatory mitigation, at a ratio of 3:1, and in accordance with the standards and specifications described in Section D of this condition, shall be required for the remaining 25 percent of the local population that is not avoided. Avoidance shall include protection of ecosystem processes essential for maintenance of the protected plant occurrence. Isolated 'islands' of protected plants disconnected by the project from natural fluvial processes shall not be considered to be protected and shall not be credited as contributing to the 75 percent avoidance requirement because such isolated populations are not sustainable.

2. Mitigation for CNDDB Rank 2 Plants (Imperiled) – Avoidance on Linears Required:~~Adjustments for Triggers. The levels of protection for a taxon may be adjusted under the following scenarios:~~ If species with a CNDDB rank of 2 are detected within the Project Disturbance Area, the project owner shall prepare and implement a Special Status Plant Mitigation Plan (Plan). The Plan shall include the following: that describes measures to achieve complete avoidance of occurrences on the project linears and contruction laydown areas, unless such avoidance would create greater environmental impacts in other resource areas (e.g., Cultural Resource Sites) or other restrictions (e.g., FAA or other restrictions for placement of transmission poles). The project owner shall provide compensatory mitigation, at a ratio of 2:1, as described below in Section D for impacts to Rank 2 plants that could not be avoided. The content of the Plan and definitions shall be as described above in subsection C.1.

   a. A description of the occurrences of the CNDDB rank 2 species on and off the project site, the percent of the local population affected, and how these occurrences would be affected by the project. The local population shall be measured, and the impacts defined, as described above under #1(a).~~State- or Federal-Listed Species. If a state or federal-listed species is detected, the project owner shall immediately notify the CDFG, USFWS, and the CPM, and comply with all measures contained in this condition as well as the terms~~

~~and conditions of any applicable federal permit, including avoidance and reconfiguration if required.~~

b. Avoidance and minimization measures that would achieve complete avoidance of occurrences on the project linear features, unless such avoidance would cause disturbance to areas not previously surveyed for biological resources.~~Local or Regional Significance. CNPS List 4 (typically assigned a State rank of 3) shall be adjusted to a higher level of protection if the plant occurrence has local or regional significance not captured by the above rankings. According to CDFG protocol (CDFG 2009): "List 3 plants may be analyzed under CEQA §15380 if sufficient information is available to assess potential impacts to such plants. Factors such as regional rarity vs. statewide rarity shall be considered in determining whether cumulative impacts to a List 4 plant are significant even if individual project impacts are not. CNPS List 3 and 4 may be considered regionally significant if, e.g., the occurrence is located at the periphery of the species' range, or exhibits unusual morphology, or occurs in an unusual habitat/substrate."~~

~~A plant occurrence of any rank may be assigned a five percent higher level of protection in its ranking if the plant occurrence exhibits one or more of the following features:~~

~~i. occurs at the outermost periphery of its range in California;~~

~~ii. represents a significant range extension or disjunct occurrence (e.g., is located outside of the 9-quad region centered on the nearest known occurrence);~~

~~iii. is in an atypical habitat, region, or elevation for the taxon that suggests that the occurrence may have genetic significance (e.g., that may increase its ability to survive future threats), or;~~

~~iv. exhibits any unusual morphology that is not clearly attributable to environmental factors that may indicate a potential new variety or sub-species.~~

c. Compensatory mitigation, at a ratio of 2:1, and in accordance with the standards and specifications described in Section D of this condition, shall be required for any portion of the local population that cannot be avoided. Avoidance shall include protection of the ecosystem processes essential for maintenance of the protected plant occurrence as described under #1 (c).~~New, Un-Described Taxa and Other Occurrences of Questionable Taxonomic Status. BLM will treat new un-described taxa as if they are BLM Sensitive, and requests 100 percent avoidance, but BLM's State Botanist will~~

~~decide the level of avoidance on a case-by-case basis. Proposed additions to the CNPS Inventory, including any new un-described taxa that are proposed additions to the CNPS Inventory, will be treated as Proposed unless rejected by the CNPS Rare Plant Botanist after the initial literature review and consultation with the network of botanists, representing state and federal agencies, consulting firms, and academic institutions. A description of the peer review process is available at: http://www.cnps.org/cnps/rareplants/. Typically, under NatureServe and CNPS ranking protocol, plants with a questionable taxonomy are assigned a lower conservation priority with the caveat that resolution of this uncertainty may result in a status change that may be lower or higher than originally assigned.~~

~~d. Significant Cumulative Effects. The assessment of known threats from over 50 sources are considered and reflected in the CNDDB threat rank, including renewable energy (see http://www.natureserve.org/publications/ConsStatusAssess_StatusFactors.pdf , "Threats").~~

~~e. Ownership/Management Threats. The degree to which a taxon's occurrences are adequately protected and managed is not included in the set of core factors used for NatureServe rankings that pre-date the 2009 revised protocols (Master et al. 2009). The threats to special-status plants with many occurrences on private lands without conservation easements, or on BLM lands managed for multiple uses (outside of a FTHL Management Area) will be captured in the new rankings available in summer 2010.~~

3. Mitigation for CNDDB Rank 3 Plants (Vulnerable) – No Onsite Avoidance Required Unless Local or Regional Significance:~~Basis for Assessing Total Documented Occurrences. The accounting or inventory of the species' total known or documented occurrences shall be based on the following sources: CNDDB processed and unprocessed data; California Consortium of Herbaria and other herbaria records; BLM records; survey data from other renewable energy projects and other related projects for which survey data is available; and reported occurrences by qualified botanists accompanied by a completed CNDDB or similar field form (with or without voucher specimens). Data considered unreliable include: range implied in literature but without collection numbers or specific location information and anecdotal reports without documentation or from non-credible sources. Occurrences based on historic (pre-CEQA, or pre-1972) collections that have not since been verified will not be considered unless verified and documented by one of the sources described above.~~ If species with a CNDDB rank of 3 are detected within the Project Disturbance Area, no onsite avoidance or compensatory mitigation shall be required unless the occurrence shall be treated as a CNDDB rank 2

plant species. A plant occurrence would be considered to have local or regional significance, in which case, the plant occurrence shall be treated as a CNDDB 2 ranked plant. A plant occurrence would be considered to have local or regional significance if:

a. It occurs at the outermost periphery of its range in California;

b. It occurs in an atypical habitat, region, or elevation for the taxon that suggests that the occurrence may have genetic significance (e.g., that may increase its ability to survive future threats), or;

c. It exhibits any unusual morphology that is not clearly attributable to environmental factors that may indicate a potential new variety or subspecies.

4. Pre-Construction Notification for State- or Federal-Listed Species, or BLM Sensitive Species. If a state or federal-listed species or BLM Sensitive species is detected, the project owner shall immediately notify the CDFG, USFWS, BLM, and the CPM.

5. Preservation of the Germplasm of Affected Special Status Plants. For all significant impacts to special status plants, regardless of whether compensatory mitigation is required, mitigation shall include seed collection from the affected special status plants onsite prior to construction to conserve the germplasm and provide a seed source for restoration efforts. The seed shall be collected under the supervision or guidance of a reputable seed storage facility such as the Rancho Santa Ana Botanical Garden Seed Conservation Program, San Diego Natural History Museum, or the Missouri Botanical Garden. The costs associated with the long-term storage of the seed shall be the responsibility of the project owner. Any efforts to propagate and reintroduce special status plants from seeds in the wild shall be carried out under the direct supervision of specialists such as those listed above and as part of a Habitat Restoration/Enhancement Plant approved by the CPM and made available for contingency efforts in the event of on-site or off-site mitigation failure.

Section D: Mitigation Measures for Special Status Plants

Where compensatory mitigation is required under the terms of Section C, above, the project owner shall mitigate project impacts to special status plant occurrences with compensatory mitigation. Compensatory mitigation shall consist of acquisition of habitat supporting the target species, or restoration/enhancement of populations of the target species, and shall meet the performance standards for mitigation described below. In the event that no opportunities for acquisition or restoration/enhancement exist, the Project owner can fund a species distribution study designed to promote the future preservation, protection or recovery of the species. Compensatory mitigation shall be at a ratio of 3:1 for CNDDB Rank 1 plants, with three acres of habitat

acquired or restored/enhanced for every acre of habitat occupied by the special status plant that will be disturbed by the Project Disturbance Area (for example if the area occupied by the special status plant collectively measured is ¼ acre than the compensatory mitigation will be ¾ of an acre). The mitigation ratio for CNDDB Rank 2 plants shall be 2:1. So, for the example above, the mitigation ratio would be one-half acre for the Rank 2 plants.

The project owner shall provide funding for the acquisition and/or restoration/enhancement, initial improvement, and long-term maintenance and management of the acquired or restored lands. The actual costs to comply with this condition will vary depending on the Project Disturbance Area, the actual costs of acquiring compensation habitat, the actual costs of initially improving the habitat, the actual costs of long-term management as determined by a Property Analysis Record (PAR) report, and other transactional costs related to the use of compensatory mitigation.

The project owner shall comply with other related requirements in this condition:

I. Compensatory Mitigation by Acquisition: The requirements for the acquisition, initial protection and habitat improvement, and long-term maintenance and management of special-status plant compensation lands include all of the following:

1. Selection Criteria for Acquisition Lands. The compensation lands selected for acquisition may include any of the following three categories:

    a. Occupied Habitat, No Habitat Threats: The compensation lands selected for acquisition shall be occupied by the target plant population and shall be characterized by site integrity and habitat quality that are required to support the target species, and shall be of equal or better habitat quality than that of the affected occurrence. The occurrence of the target special-status plant on the proposed acquisition lands should be viable, stable or increasing (in size and reproduction).

    b. Occupied Habitat, Habitat Threats. Occupied compensation lands characterized by habitat threats may also be acquired as long as the population could be reasonably expected to recover with habitat restoration efforts (e.g., OHV or grazing exclusion, or removal of invasive non-native plants) and is accompanied by a Habitat Enhancement/Restoration Plan as described in Section D.II, below.

    c. Unoccupied but Adjacent. The project owner may also acquire habitat for which occupancy by the target species has not been documented, if the proposed acquisition lands are adjacent to occupied habitat. The Project owner shall provide evidence that acquisitions of such unoccupied lands would improve the defensibility and long-term sustainability of the occupied habitat by providing a protective buffer around the occurrence and by enhancing connectivity with undisturbed

habitat. This acquisition may include habitat restoration efforts where appropriate, particularly when these restoration efforts will benefit adjacent habitat that is occupied by the target species.

2. Review and Approval of Compensation Lands Prior to Acquisition. The project owner shall submit a formal acquisition proposal to the CPM describing the parcel(s) intended for purchase. This acquisition proposal shall discuss the suitability of the proposed parcel(s) as compensation lands for special-status plants in relation to the criteria listed above, and must be approved by the CPM.

3. Management Plan. The project owner or approved third party shall ~~prepare~~ fund the development of a management plan for the compensation lands ~~in consultation with~~ for the entity that will be managing the lands. The goal of the management plan shall be to support and enhance the long-term viability of the target special-status plant occurrences. The Management Plan shall be submitted for review and approval to the CPM, in consultation with BLM.

4. Integrating Special-Status Plant Mitigation with Other Mitigation lands. If all or any portion of the acquired special status species habitat, state jurisdictional waters, or other required compensation lands meets the criteria above for special-status plant compensation lands, the portion of the other species' or habitat compensation lands that meets any of the criteria above may be used to fulfill that portion of the obligation for special-status plant mitigation.

5. Compensation Lands Acquisition Requirements. The project owner shall comply with the following requirements relating to acquisition of the compensation lands after the CPM, has approved the proposed compensation lands:

   Preliminary Report. The project owner, or an approved third party, shall provide a recent preliminary title report, initial hazardous materials survey report, biological analysis, and other necessary or requested documents for the proposed compensation land to the CPM. All documents conveying or conserving compensation lands and all conditions of title are subject to review and approval by the CPM. For conveyances to the State, approval may also be required from the California Department of General Services, the Fish and Game Commission and the Wildlife Conservation Board.

   Title/Conveyance. The project owner shall acquire and transfer fee title to the compensation lands, a conservation easement over the lands, or both fee title and conservation easement, as required by the CPM. Any transfer of a conservation easement or fee title must be to CDFG, a non-profit organization qualified to hold title to and manage compensation lands (pursuant to California Government Code section

65965), or to BLM or other public agency approved by the CPM. If an approved non-profit organization holds fee title to the compensation lands, a conservation easement shall be recorded in favor of CDFG or another entity approved by the CPM. If an entity other than CDFG holds a conservation easement over the compensation lands, the CPM may require that CDFG or another entity approved by the CPM, in consultation with CDFG, be named a third party beneficiary of the conservation easement. The project owner shall obtain approval of the CPM of the terms of any transfer of fee title or conservation easement to the compensation lands.

Initial Protection and Habitat Improvement. The project owner shall fund activities that the CPM requires for the initial protection and habitat improvement of the compensation lands. These activities will vary depending on the condition and location of the land acquired, but may include trash removal, construction and repair of fences, invasive plant removal, and similar measures to protect habitat and improve habitat quality on the compensation lands. The costs of these activities are estimated to be $27 per acre, using the estimated cost per acre for special status species habitat mitigation as a best available proxy, but actual costs will vary depending on the measures that are required for the compensation lands. A non-profit organization, CDFG or another public agency may hold and expend the habitat improvement funds if it is qualified to manage the compensation lands (pursuant to California Government Code section 65965), if it meets the approval of the CPM in consultation with CDFG, and if it is authorized to participate in implementing the required activities on the compensation lands. If CDFG takes fee title to the compensation lands, the habitat improvement fund must be paid to CDFG or its designee.

Property Analysis Record. Upon identification of the compensation lands, the project owner shall conduct a Property Analysis Record (PAR) or PAR-like analysis to establish the appropriate amount of the long-term maintenance and management fund to pay the in-perpetuity management of the compensation lands. The PAR or PAR-like analysis must be approved by the CPM before it can be used to establish funding levels or management activities for the compensation lands.

Long-term Maintenance and Management Funding. The project owner shall provide money to establish an account with non-wasting capital that will be used to fund long-term maintenance and management of the compensation lands. The amount of money to be paid will be determined through an approved Property Analysis Record (PAR) or PAR-like analysis conducted for the compensation lands. Until an approved PAR or PAR-like analysis is conducted for the compensation lands, the amount of required funding is initially estimated to be $692

for every acre of compensation lands, using as the best available proxy, the estimated cost for special status species habitat compensatory mitigation. If compensatory lands will not be identified and a PAR or PAR-like analysis completed within the time period specified for this payment (see verification section at the end of this condition), the project owner shall either: (i) provide initial payment equal to the amount of $692 per acre, multiplied by a mitigation ratio of 3:1 (for Rank 1 species) or 2:1 (for Rank 2 species), and multiplied by the number of acres the project owner proposes to acquire for compensatory mitigation; or (ii) provide security to the Energy Commission under subsection (g), "Mitigation Security" below, in an amount equal to $692 multiplied by the number of acres the project owner proposes to acquire for compensatory mitigation at the established mitigation ratio. The amount of the required initial payment or security for this item shall be adjusted for any change in the Project Disturbance Area as described above. If an initial payment is made based on the estimated per acre costs, the project owner shall deposit additional money as may be needed to provide the full amount of long-term maintenance and management funding indicated by a PAR or PAR-like analysis, once the analysis is completed and approved. If the approved analysis indicates less than $692 per acquired acre will be required for long-term maintenance and management, the excess paid will be returned to the project owner. The project owner must obtain the CPM's approval of the entity that will receive and hold the long-term maintenance and management fund for the compensation lands. The CPM will consult with CDFG before deciding whether to approve an entity to hold the project's long-term maintenance and management funds.

Interest, Principal, and Pooling of Funds. The Project owner shall ensure that an agreement is in place with the long-term maintenance and management fund (endowment) holder/manager to ensure the following requirements are met:

Interest. Interest generated from the initial capital long-term maintenance and management fund shall be available for reinvestment into the principal and for the long-term operation, management, and protection of the approved compensation lands, including reasonable administrative overhead, biological monitoring, improvements to carrying capacity, law enforcement measures, and any other action that is approved by the CPM and is designed to protect or improve the habitat values of the compensation lands.

Withdrawal of Principal. The long-term maintenance and management fund principal shall not be drawn upon unless such withdrawal is deemed necessary by the CPM or by the approved third-party long-

term maintenance and management fund manager, to ensure the continued viability of the species on the compensation lands.

Pooling Long-Term Maintenance and Management Funds. An entity approved to hold long-term maintenance and management funds for the Project may pool those funds with similar non-wasting funds that it holds from other projects for long-term maintenance and management of compensation lands for special-status plants. However, for reporting purposes, the long-term maintenance and management funds for this Project must be tracked and reported individually to the CPM.

Other Expenses. In addition to the costs listed above, the Project owner shall be responsible for all other costs related to acquisition of compensation lands and conservation easements, including but not limited to the title and document review costs incurred from other state agency reviews, overhead related to providing compensation lands to CDFG or an approved third party, escrow fees or costs, environmental contaminants clearance, and other site cleanup measures.

Mitigation Security. The Project owner shall provide financial assurances to the CPM to guarantee that an adequate level of funding is available to implement any of the mitigation measures required by this condition that are not completed prior to the start of ground-disturbing project activities. Financial assurances shall be provided to the CPM in the form of an irrevocable letter of credit, a pledged savings account or another form of security ("Security") approved by the CPM. The amount of the Security shall be $692 per acre, using the estimated cost per acre for special status species habitat mitigation as a best available proxy, and multiplied by the established mitigation ratio, for every acre of habitat supporting the target special status plant species which is significantly impacted by the project. The actual costs to comply with this condition will vary depending on the actual costs of acquiring compensation habitat, the costs of initially improving the habitat, and the actual costs of long-term management as determined by a PAR report. Prior to submitting the Security to the CPM, the Project owner shall obtain the CPM's approval of the form of the Security. The CPM may draw on the Security if the CPM determines the project owner has failed to comply with the requirements specified in this condition. The CPM may use money from the Security solely for implementation of the requirements of this condition. The CPM's use of the Security to implement measures in this condition may not fully satisfy the project owner's obligations under this condition, and the project owner remains responsible for satisfying the obligations under this condition if the Security is insufficient. The unused Security shall be returned to the Project owner in whole or in part upon successful completion of the associated requirements in this condition.

II. Compensatory Mitigation by Habitat Enhancement/Restoration: As an alternative or adjunct to land acquisition for compensatory mitigation the project owner may undertake habitat enhancement or restoration for the target special-status plant species. Habitat enhancement or restoration activities must achieve protection at a 3:1 ratio for Rank 1 plants and 2:1 for Rank 2 plants, with improvements applied to three acres, or two acres, respectively, of habitat for every acre special-status plant habitat directly or indirectly disturbed by the Project Disturbance Area (for example if the area occupied by the special status plant collectively measured is ¼ acre than the improvements would be applied to an area equal to ¾ of an acre at a 3:1 ratio, or one-half acre at a 2:1 ratio). Examples of suitable enhancement projects include but are not limited to the following: i) control unauthorized vehicle use into an occurrence (or pedestrian use if clearly damaging to the species); ii) control of invasive non-native plants that infest or pose an immediate threat to an occurrence; iii) exclude grazing by wild burros or livestock from an occurrence; or iv) restore lost or degraded hydrologic or geomorphic functions critical to the species by restoring previously diverted flows or increasing groundwater availability for dependent species.

If the project owner elects to undertake a habitat enhancement project for mitigation, the project must meet the following performance standards: The proposed enhancement project shall achieve rescue of an off-site occurrence that is currently assessed, based on the NatureServe threat ranking system[5] with one of the following threat ranks: a) long-term decline >30%; b) an immediate threat that affects >30% of the population, or c) has an overall threat impact that is High to Very High. "Rescue" would be considered successful if it achieves an improvement in the occurrence trend to "stable" or "increasing" status, or downgrading of the overall threat rank to slight or low (from "High" to "Very High").

If the Project owner elects to undertake a habitat enhancement project for mitigation, they shall submit a Habitat Enhancement/Restoration Plan to the CPM for review and approval, and shall provide sufficient funding for implementation and monitoring of the Plan. The amount of the Security shall be $692 per acre, using the estimated cost per acre for special status species habitat mitigation as a best available proxy, at the ratio of 3:1 for Rank 1 plants and 2:1 for Rank 2 plants, for every acre of habitat supporting the target special-status plant species which is directly or indirectly impacted by

[5] Master, L., D. Faber-Langendoen, R. Bittman, G. A., Hammerson, B. Heidel, J. Nichols, L. Ramsay, and A. Tomaino. 2009. *NatureServe Conservation Status Assessments: Factors for Assessing Extinction Risk.* NatureServe, Arlington, VA. Online: http://www.natureserve.org/publications/ConsStatusAssess_StatusFactors.pdf , "Threats". See also: Morse, L.E., J.M. Randall, N. Benton, R. Hiebert, and S. Lu. 2004. An Invasive Species Assessment Protocol: Evaluating Non-Native Plants for Their Impact on Biodiversity. Version 1. NatureServe, Arlington, Virginia. Online: http://www.natureserve.org/publications/pubs/invasiveSpecies.pdf

the project. The amount of the security may be adjusted based on the actual costs of implementing the enhancement, restoration and monitoring. The implementation and monitoring of the enhancement/restoration may be undertaken by an appropriate third party such as NFWF, subject to approval by the CPM. The Habitat Enhancement/Restoration Plan shall include each of the following:

1. Goals and Objectives. Define the goals of the restoration or enhancement project and a measurable course of action developed to achieve those goals. The objective of the proposed habitat enhancement plan shall include restoration of a target special-status plant occurrence that is currently threatened with a long-term decline. The proposed enhancement plan shall achieve an improvement in the occurrence trend to "stable" or "increasing" status, or downgrading of the overall threat rank to slight or low (from "High" to "Very High").
2. Historical Conditions. Provide a description of the pre-impact or historical conditions (before the site was degraded by weeds or grazing or ORV, etc.), and the desired conditions.
3. Site Characteristics. Describe other site characteristics relevant to the restoration or enhancement project (e.g., composition of native and pest plants, topography and drainage patterns, soil types, geomorphic and hydrologic processes important to the site or species.
4. Ecological Factors. Describe other important ecological factors of the species being protected, restored, or enhanced such as total population, reproduction, distribution, pollinators, etc.
5. Methods. Describe the restoration methods that will be used (e.g., invasive exotics control, site protection, seedling protection, propagation techniques, etc.) and the long-term maintenance required. The implementation phase of the enhancement must be completed within five years.
6. Budget. Provide a detailed budget and time-line, and develop clear, measurable, objective-driven annual success criteria.
7. Monitoring. Develop clear, measurable monitoring methods that can be used to evaluate the effectiveness of the restoration and the benefit to the affected species. The Plan shall include a minimum of five years of quarterly monitoring, and then annual monitoring for the remainder of the enhancement project, and until the performance standards for rescue of a threatened occurrence are met. At a minimum the progress reports shall include: quantitative measurements of the projects progress in meeting the enhancement project success criteria, detailed description of remedial actions taken or proposed,and contact information for the responsible parties.

8. Reporting Program. The Plan shall ensure accountability with a reporting program that includes progress toward goals and success criteria. Include names of responsible parties.

9. Contingency Plan. Describe the contingency plan for failure to meet annual goals.

10. Long-term Protection. Include proof of long-term protection for the restoration site. For private lands this would include conservations easements or other deed restrictions; projects on public lands must be contained in a Flat-Tailed Horned Lizard Management Area, Wildlife Habitat Management Area, or other land use protections that will protect the mitigation site and target species.

~~**III. Compensatory Mitigation by Conducting or Contributing to a Special Status Plant Species Distribution Study**: As determined by the CPM, in the event that there are no opportunities for mitigation through acquisition or restoration/enhancement, a Scientific Study of Distribution and Status for the affected special status plant species may be implemented or funded. Information on the distribution, status, or health of known occurrences, ecological requirements, and ownership and management opportunities is very limited for many of the special status species that occur on the project or have potential to occur on the project, especially the late summer and fall blooming species. Some of these late blooming species are only known from a few viable occurrences in California, and historic occurrences that have not been relocated or surveyed since they were first documented. The objectives of this study would be to better understand the full distribution of the affected species, the degree and immediacy of threats to occurrences, and ownership and management opportunities, with the primary goal of future preservation, protection, or recovery of the affected species within California. Additionally, the study should delineate other areas in the region that should be avoided or protected due to rare plant presence. To further ensure protection, study data shall be published in the state's rare plant database.~~

~~At a minimum, the study shall include the following:~~

~~1. Occurrence and Life History Review. The Study would include an evaluation of all documented, historical, and reported localities for the affected species and a review of current information on the species life history. This would include a review of the CNDDB database, records from regional and national herbaria, literature review, consultation with U.C. Riverside, San Diego Natural History Museum, and other educational~~

~~institutions or natural heritage organizations in California, Arizona, and Nevada, etc.), other biotechnical survey reports from the region, and information from regional botanical experts.~~

2. ~~Conduct Site Visits to Documented and Reported Localities. Documented and reported occurrences would be evaluated in the field during the appropriate time of the year for each late blooming species. If located, these occurrences would be evaluated for population size (area and quantity), population trend, ecological characteristics, soils, habitat quality, potential threats, degree and immediacy of threats, ownership, and management opportunities. GPS location data would also be collected during these site visits.~~

3. ~~Survey Surrounding Areas. Areas surrounding the occurrences that contain habitat suitable to support the affected species shall be surveyed to determine the full extent of its range and distribution. If additional populations are found, collect data (GPS and assessment) on these additional populations consistent with III.2 above.~~

4. ~~Prepare a Status and Distribution Study Report. A report shall be prepared that contains the results of the surveys and assessments. The report shall contain the following components: a) Range and Distribution (including maps and GPS data); b) Abundance and Population Trends; c) Life History; d) Habitat Necessary for Survival; d) Factors affecting Ability to Survive and Reproduce; e) Degree and Immediacy of Threat; f) Ownership and Management Opportunities for Protection or Recovery; g) Sources of Information, and g) Conclusions. The conclusions shall contain the following factors: i) present or threatened modification or destruction of its habitat; ii) competition; iii) disease; iv) or other natural occurrences (such as climate change) or human-related activities. This valuable information will provide a better understanding of the ecological factors driving the distribution of these species, identify opportunities for mitigation, and management opportunities for recovery. All data from this study will be submitted for incorporation into the CNDDB system and the study report will be made available to resource agencies, conservation groups, and other interested parties.~~

~~The cost to implement or fund the study shall be no greater than the cost for acquisition, enhancement, and long-term management of compensatory mitigation lands based on the specifications and standards for acquisition or restoration/enhancement described under D.I and D.II.~~

~~Special Status Plant Mitigation Plan. Upon completion of the summer-fall 2010 surveys, (see Section B of this Condition), the project owner shall prepare a Special Status Plant Mitigation Plan. The Plan shall also include the mitigation requirements for any additional special-status plants found during the summer-fall 2010 surveys (see Sections B and C of this Condition) in accordance with the mitigation triggers described above (Section C of this condition) and that meet the performance standards specified below. Avoidance and Minimization Measures described in Section A of this condition are required for all special-status plants, regardless of NatureServe rank or CNPS List.~~

1. ~~On-Site Avoidance. BLM requests 100 percent avoidance for BLM Sensitive species but BLM's State Botanist will decide the level of avoidance on a case-by-case basis. On-site avoidance shall also be required if the impact to a special-status species with a NatureServe Global Rank of G1 or G2 exceeds 10 percent of the species' known and documented occurrences (see 'Level 1 Trigger', Section C of this Condition). Under this scenario, the Project owner shall be required to avoid a minimum of 75 percent of the total population. For perennial taxa the percent avoidance shall be measured based on the percentage of the total individuals affected; for annuals the percent avoidance shall be measured based on the total area occupied by the occurrence plus any additional habitat deemed essential for maintaining healthy, reproductive populations (BLM CDD 2002). The Project owner shall implement all measures described in Section A of this Condition to protect the avoided occurrence from accidental direct and indirect effects during construction, operation, and closure.~~

2. ~~Off-Site Compensatory Mitigation. One or more of the following options for mitigation may be used to reduce Level 2 and Level 3 impacts to special-status plants (see Section C of this Condition) to less than significant levels:~~

   a. ~~Acquire Off-Site Compensatory Land. To fully mitigate for the loss of special-status plants, the Project owner shall provide compensatory mitigation by acquiring, in fee title or conservation easement, lands meeting the specific criteria outlined in **D2b** below, and in an amount equal to the amount of occupied special-status plant habitat disturbed by the final Project footprint. The Project footprint means all lands disturbed in the construction and operation of the Project, including all Project linears.~~

   b. ~~Criteria for Compensatory Acquisition Lands. If offsite acquisition is selected to meet the mitigation obligations under **BIO-19**, the Project owner shall acquire, in fee title or conservation easement, lands that meet the criteria below. The responsibilities for acquisition and management of the compensation lands may be~~

~~delegated by written agreement to a qualified third party, such as a non-governmental organization dedicated to habitat conservation. Additional funds shall be provided for basic long-term stewardship of the conservation easement. At a minimum, long-term management shall consist of the activities described in Land Trust Standards and Practices (Land Trust Alliance 2004, Practice 12A) http://www.landtrustalliance.org/learning/sp/land-trust-standards-and-practices for start-up and annual management activities, including preparation of a long-term management and monitoring plan. The amount of the long-term management and maintenance fund shall be based on PAR or PAR-like analysis. The terms and conditions for acquisition under this condition shall be modeled on those described in **BIO-10**. The acquisition lands must be within California, and must meet one or more of the following additional requirements:~~

1) ~~Occupied with good to excellent site integrity. Contains an occurrence of the target special-status plant. The occurrence may be smaller than the affected occurrence but must be a viable reproducing occurrence, stable or increasing (in size and reproduction), with good or better habitat quality than the affected occurrence, and with a reasonable expectation of long-term sustainability. The amount of land to be acquired shall be equivalent to the total acres of the affected occupied habitat mitigated at a ratio of 3:1 (3 acres acquired for every one acre of occupied habitat affected).~~

2) ~~Occupied but with threats to habitat quality and accompanied by an approved restoration plan. The occurrence or the site may contain threats to its integrity as long as the population or the site can be reasonably expected to recover with minor restoration (e.g., barricading OHV, excluding grazing, or minor pest plant removal) and is accompanied by a restoration plan that meets the minimum standards described in **Section D2c** Guidelines for the Preparation of Habitat Restoration Plan below. The amount of land to be acquired shall be equivalent to the total acres of affected occupied habitat mitigated at a ratio of 3:1 (3 acres acquired for every one acre of occupied habitat affected), with the additional expense of preparing and implementing an approved habitat restoration plan, including long-term monitoring. The restoration plan shall be prepared in accordance with all guidelines described below in **Section D2c**, Guidelines for the Preparation of Habitat Restoration Plan.~~

3) ~~Unoccupied but adjacent to occupied habitat. The acquired habitat may be unoccupied but it improves the defensibility and long-term sustainability of the occupied habitat by expanding the~~

~~buffer of protection around the occurrence so as to prevent future development of adjacent habitat and protect its connectivity to undisturbed habitat. Buffer lands may or may not be dominated by the same habitats that support the special-status plants but must provide some habitat continuity between the occupied habitat and undisturbed habitats of a high integrity beyond the buffer lands. Habitat integrity, connectivity, defensibility, and potential threats shall also be addressed in the proposal. The amount of land to be acquired shall be equivalent to the total acres of affected occupied habitat mitigated at a ratio of 4:1 (4 acres acquired for every one acre of occupied habitat affected).~~

4) ~~Unoccupied and not adjacent to occupied habitat. Must contain high-quality habitat that is critical to the maintenance or sustainability of the affected species and represent a potential reserve in the future (for either natural colonization or artificial). Good to high quality within the Colorado Desert near or within the Yuha Desert or West Mesa FTHL Management Areas. Acquired lands may also focus on linkages for species dispersal between major populations and refugia at higher elevations/more mesic habitats to accommodate species migration with future climate change. Habitat integrity, connectivity, defensibility, and potential threats shall also be addressed in the proposal. The amount of land to be acquired shall be equivalent to the total acres of affected occupied habitat mitigated at a ratio of 5:1 (5 acres acquired for every one acre of occupied habitat affected).~~

~~Review and Approval of Compensation Lands Prior to Acquisition. The project owner shall submit a formal acquisition proposal to the CPM and CDFG, describing the parcel intended for purchase. This proposal shall discuss the suitability of the proposed parcel(s) as compensation for project-related impacts to special status plants in relation to the criteria specified above, and must be approved by the CPM. The CPM will share the proposal with and consult with CDFG, BLM, and the USFWS before deciding whether to approve or disapprove the proposed acquisition.~~

c. ~~Guidelines for the Preparation of Habitat Restoration Plan. The Project owner shall submit a detailed Habitat Restoration Plan that includes all of the following components and according to the guidelines in [1)] through [10)] below:~~

1) ~~Define the goals of the restoration project and a measurable course of action developed to achieve those goals. The goals~~

~~and objectives must meet the following performance standards described below:~~

- ~~The proposed habitat restoration project must achieve the rescue of an occurrence on acquired compensation land that is currently assessed with: a long-term decline >30 percent, or; an immediate threat that affects >30 percent of the population, or; has an overall threat impact that is High to Very High (see NatureServe Threat Ranking system, at: http://www.natureserve.org/publications/ConsStatusAssess_StatusFactors.pdf , "Threats").~~
- ~~The proposed restoration must achieve an improvement in the occurrence trend to "stable" or "increasing" status, or downgrading of the overall threat rank to slight or low (from "High" to "Very High").~~
- ~~Restoration projects may include one or more of the following types of projects: i) control unauthorized vehicle use into an occurrence (or pedestrian use if clearly damaging to the species); ii) control invasive weeds that infest or pose an immediate threat to an occurrence; iii) exclude grazing by wild burros or livestock from an occurrence; or iv) restore critical lost or degraded hydrologic or geomorphic functions to known special status plant occurrences that have lost historic sheet flow or instream flows, as a result of diverting washes upslope by roads or ditches.~~

~~2) Estimate the pre-impact or historical conditions (before the site was degraded by weeds or grazing or OHV, etc.), and the desired conditions;~~

~~3) Describe other site characteristics relevant to the restoration or enhancement project (e.g., composition of native and pest plants, topography and drainage patterns, soil types, geomorphic and hydrologic processes important to the site or species;~~

~~4) Describe other important ecological factors of the species being protected, restored, or enhanced such as total population, reproduction, distribution, pollinators, etc.;~~

~~5) Describe the restoration methods that will be used (e.g., invasive exotics control, site protection, seedling protection, propagation techniques, etc.) and the long-term maintenance required. The implementation phase of the restoration must be completed within five years;~~

6) ~~Provide a detailed budget and time-line, develop clear, measurable, objective-driven annual success criteria;~~

7) ~~Develop clear, measurable monitoring methods that can be used to evaluate the effectiveness of the restoration and the benefit to the affected species. The Plan shall initially include a minimum of five years of quarterly monitoring and subsequent annual monitoring for the remainder of the life of the Project. At a minimum the progress reports shall include: quantitative measurements of the projects progress in meeting the restoration project success criteria, detailed description of remedial actions taken or proposed, and contact information for the responsible parties.~~

8) ~~Ensure accountability with a reporting program that includes progress toward goals and success criteria. Include names of responsible parties.~~

9) ~~Describe the contingency plan and adaptive management measures for failure to meet annual goals.~~

10) ~~Include proof of the existence of long-term protection for the acquired site.~~

~~Mitigation Security. The Project owner shall provide financial assurances to the CPM under terms modeled on those specified in **Section 3** of **BIO-10**, to guarantee that an adequate level of funding is available to implement the mitigation measures described above. These funds shall be used solely for implementation of the measures associated with the project in the event the project owner fails to comply with the requirements specified in this condition. The CPM's use of the security to implement measures in this condition may not fully satisfy the project owner's obligations under this condition. Financial assurance can be provided to the CPM in the form of security prior to initiating ground-disturbing project activities. Prior to submittal to the CPM, the security shall be approved by the CPM, in consultation with BLM, to ensure funding. The amount of the security shall be determined according to the mitigation ratios described in **D2b** [1) through 4)], Off-Site Compensatory Mitigation section of this condition. The amount of security shall be adjusted for any change in the Project footprint as described above.~~

~~In lieu of acquiring lands itself, the Project owner may satisfy the requirements of this condition by depositing funds into the Renewable Energy Action Team (REAT) Account established with the National Fish and Wildlife Foundation (NFWF), under terms modeled on those in Section A.3(i) in Condition of Certification **BIO-10**.~~

~~The responsibility for acquisition of compensation lands may be delegated to a third party other than NFWF, such as a qualified land trust or other non-governmental organization supportive of habitat conservation, by written~~

~~agreement of the Energy Commission. Such delegation shall be subject to approval by the CPM in consultation with BLM prior to land acquisition, restoration, or management activities.~~

Verification: The Special Status Plant Impact Avoidance and Minimization Measures shall be incorporated into the BRMIMP as required under Condition of Certification **BIO-7**.

Raw GPS data, metadata, and CNDDB field forms shall be submitted to the CPM within two weeks of the completion of each survey. A preliminary summary of results for the late summer/fall botanical surveys shall also be submitted to the CPM and BLM's State Botanist within two weeks following the completion of the surveys. If surveys are split into more than one period, then a summary letter shall be submitted following each survey period. The Final Summer-Fall Botanical Survey Report, GIS shape files, and metadata shall be submitted to the BLM State Botanist and the CPM no less than 30 days prior to the start of ground-disturbing activities. The Final Report shall include a detailed accounting of the acreage of Project impacts to special status plant occurrences.

A draft Conceptual Special Status Plant Mitigation Plan as described in Section C shall be submitted to the BLM State Botanist and the CPM for review and approval no less than 30 days prior to the start of ground-disturbing activities. ~~Progress reports for the late summer and fall botanical surveys shall be submitted to the CPM and BLM's State Botanist no later than September 30, 2010 and October 30, 2010, respectively. The Final Summer-Fall Botanical Survey Report, GIS shape files and metadata shall be submitted to the BLM State Botanist and the CPM no less than 30 days prior to the start of ground-disturbing activities.~~

The Project owner shall immediately provide written notification to the CPM, CDFG, USFWS, and BLM if it detects a State- or Federal-Listed Species, or BLM Sensitive Species at any time during its late summer/fall botanical surveys or at any time thereafter through the life of the project, including conclusion of project decommissioning.

No less than 30 days prior to the start of ground-disturbing activities, the project owner shall submit grading plans and construction drawings to the CPM which depict~~ing~~ the location of Environmentally Sensitive Areas and the Avoidance and Minimization Measures contained in Section A of this Condition.

If compensatory mitigation is required, no less than 30 days prior to the start of ground-disturbing activities, the project owner shall submit to the CPM, Security adequate to acquire compensatory mitigation lands and/or undertake habitat enhancement or restoration activities, as described in this condition.

No fewer than 90 days prior to acquisition of compensatory mitigation lands, the project owner shall submit a formal acquisition proposal and draft Management Plan for the proposed lands to the CPM, with copies to CDFG, USFWS, and BLM, describing the parcels intended for purchase and shall obtain approval from the CPM prior to the acquisition. No fewer than 90 days prior to acquisition of compensatory mitigation lands, the project owner shall submit to the CPM and obtain CPM approval of any agreements to delegate land acquisition to an approved third party, or to manage compensation lands; such agreement shall be executed and implemented within 18 months of the Energy Commission's certification of the project.

The Project owner or an approved third party shall complete the acquisition and all required transfers of the compensation lands, and provide written verification to the CPM of such completion no later than 18 months after the start of project ground-disturbing activities. If NFWF or another approved third party is being used for the acquisition, the project owner shall ensure that funds needed to accomplish the acquisition are transferred in timely manner to facilitate the planned acquisition and to ensure the land can be acquired and transferred prior to the 18-month deadline.

If habitat enhancement is proposed, no later than six months following the start of ground-disturbing activities, the project owner shall obtain CPM approval of the final Habitat Enhancement/Restoration Plan, prepared in accordance with Section D, and submit to the CPM or a third party approved by the CPM Security adequate for long-term implementation and monitoring of the Habitat Enhancement/Restoration Plan.

Enhancement/restoration activities shall be initiated no later than 12 months from the start of construction. The implementation phase of the enhancement project shall be completed within five years of initiation. Until completion of the five-year implementation portion of the enhancement action, a report shall be prepared and submitted as part of the Annual Compliance Report. This report shall provide, at a minimum: a summary of activities for the preceding year and a summary of activities for the following year; quantitative measurements of the project's progress in meeting the enhancement project success criteria; detailed description of remedial actions taken or proposed; and contact information for the responsible parties.

If a Status and Distribution Study is proposed, the study shall commence no later than six months following the start of ground-disturbing activities. The draft study shall be submitted to the CPM and BLM Botanist for review and approval no more than two years following the start of ground-disturbing activities. The final study shall be submitted no more than 30 months following the start of ground-disturbing activities.

Within 18 months of ground-disturbing activities, the Project owner shall transfer to the CPM or an approved third party the difference between the Security paid and the actual costs of (1) acquiring compensatory mitigation lands, completing initial protection and habitat improvement , and funding the long-term maintenance and management of compensatory mitigation lands; and/or (2) implementing and providing for the long-term protection and monitoring of habitat enhancement or restoration activities.

Implementation of the special status plant impact avoidance and minimization measures shall be reported in the Monthly Compliance Reports prepared by the Designated Botanist. Within 30 days after completion of project construction, the project owner shall provide to the CPM, for review and approval, in consultation with the BLM State Botanist, a written construction termination report identifying how measures have been completed.

The Project owner shall submit a monitoring report every year for the life of the project to monitor effectiveness of protection measures for all avoided special-status plants to the CPM and BLM State Botanist. The monitoring report shall include: dates of worker awareness training sessions and attendees, completed CNDDB field forms for each avoided occurrence on-site and within 100 feet of the Project boundary off-site, and description of the remedial action, if warranted and planned for the upcoming year. The completed forms shall include an inventory of the special-status plant occurrences and description of the habitat conditions, an indication of population and habitat quality trends.

~~No less than 30 days prior to ground-disturbing activities the Project owner shall submit to the CPM for review and approval, in consultation with the BLM State Botanist, a draft Special-Status Plant Mitigation Plan. If state or federal listed plants are potentially affected, the Project owner shall also submit the Special-Status Plant Mitigation Plan to CDFG and USFWS. The Plan shall contain, at a minimum, a conceptual proposal for compensatory mitigation through acquisition and possible restoration. If avoidance is mandatory (in accordance with Section C-1 and D-1 of this condition) the draft Plan shall include grading plans and other relevant construction drawings clearly depicting the location of the avoided plants.~~

~~The implementation phase of the restoration on acquired lands shall be completed within five years of initiation. During the initial five-year period, quarterly reports shall be submitted to the CPM no more than 30 days after the end of each quarter. After completion of the initial five year period, the Project owner shall submit a monitoring report yearly for the life of the project to monitor effectiveness of restoration measures and description of any planned remedial actions or additional habitat restoration~~

~~measures to be performed in the upcoming year. This report shall provide, at a minimum: a summary of activities for the preceding year and a summary of activities for the following year; quantitative measurements of the Project's progress in meeting the restoration project success criteria; detailed description of remedial actions taken or proposed; and contact information for the responsible parties.~~

~~Within 90 days after completion of Project construction, the Project owner shall provide to the CPM an analysis with the final accounting, based on GIS analysis of post-construction aerial photography, of the amount of special-status plants and their habitat disturbed during Project construction. This shall be the basis for the final number of acres of habitat required for acquisition, as described in Section C.~~

~~If the Project owner elects to fund the acquisition and initial improvement of compensation lands through NFWF by depositing funds for that purpose into NFWF's REAT Account, payment of the initial funds for acquisition and initial improvement must be made at least 30 days prior to the start of ground-disturbing activities. No later than 12 months after the start of ground-disturbing project activities, the project owner, or a third-party approved by the CPM, in consultation with CDFG and BLM, shall submit a formal acquisition proposal to the CPM describing the parcel(s) intended for purchase and shall obtain approval from the CPM, in consultation with CDFG, BLM, and USFWS, prior to acquisition. The PAR or PAR-like Analysis shall be completed no later than 18 months from the start of ground-disturbing activities, after which the amount will be adjusted. If acquisition is proposed, the Project owner shall submit to the CPM for review and approval, in consultation with the BLM State Botanist, a final Special-Status Plant Mitigation Plan for proposed acquisition lands no later than 18 months from the start of ground-disturbing activities.~~

~~Draft agreements to delegate land acquisition to CDFG, BLM, or an approved third party and agreements to manage compensation lands shall be submitted to Energy Commission staff for review and approval (in consultation with CDFG) prior to land acquisition. Such agreements shall be mutually approved and executed at least 30 days prior to start of any project-related ground disturbance activities. The project owner shall provide written verification to the CPM that the compensation lands have been acquired and recorded in favor of the approved recipient(s). Alternatively, before beginning project ground-disturbing activities, the project owner shall provide Security in accordance with~~ **~~Mitigation Security~~** ~~section~~ **~~D~~** ~~of this condition. Within 180 days after the land purchase, as determined by the date on the title, the project owner shall provide the CPM with a management plan for review and approval, in consultation with CDFG, BLM, and USFWS, for the compensation lands and associated funds.~~

~~If special status plant are preserved onsite, an annual report shall be prepared that summarizes any protection measures for all avoided special-status plants onsite to the CPM and BLM State Botanist. The monitoring report shall include: dates of worker awareness training sessions and attendees, an inventory of the special-status plant~~

~~occurrences and description of the habitat conditions, an indication of population and habitat quality trends, and description of the remedial action, if warranted and planned for the upcoming year. Implementation of the special-status plant impact avoidance and minimization measures shall be reported in the Monthly Compliance Reports prepared by the Designated Botanist. Within 30 days after completion of Project construction, the Project owner shall provide to the CPM, for review and approval in consultation with the BLM State Botanist, a written construction termination report identifying how measures have been completed.~~

MONITORING BIRD IMPACTS FROM SOLAR TECHNOLOGY

BIO-21 The project owner shall prepare and implement a Bird Monitoring Study to monitor the death and injury of birds from collisions with facility features such as reflective mirror-like surfaces and from heat, and bright light from concentrating sunlight. The study design shall be approved by BLM's Biologist and the CPM in consultation with CDFG and USFWS, and shall be incorporated into the project's BRMIMP and implemented. The Bird Monitoring Study shall include detailed specifications on data and carcass collection protocol and a rationale justifying the proposed schedule of carcass searches. The study shall also include seasonal trials to assess bias from carcass removal by scavengers as well as searcher bias. The Plan shall include adaptive management strategies that include the placement of bird flight diverters, aerial markers, or other strategies to minimize collisions with the SunCatcher units.

Verification: No more than 30 days following the publication of the Energy Commission License Decision or the Record of Decision/ROW Issuance, whichever comes first, the project owner shall submit to the CPM, BLM's Biologist, USFWS, and CDFG, a final Bird Monitoring Study. Modifications to the Bird Monitoring Study shall be made only after approval from BLM's Biologist and the CPM.

For one year following the beginning of power plant operation the Designated Biologist shall submit quarterly reports to BLM's Biologist, CPM, CDFG, and USFWS describing the dates, durations, and results of monitoring. The quarterly reports shall provide a detailed description of any project-related bird or wildlife deaths or injuries detected during the monitoring study or at any other time. Following the completion of the fourth quarter of monitoring the Designated Biologist shall prepare an Annual Report that summarizes the year's data, analyzes any project-related bird fatalities or injuries detected, and provides recommendations for future monitoring and any adaptive management actions needed. The Annual Report shall be provided to the CPM, BLM's Biologist, CDFG, and USFWS. Quarterly reporting shall continue until BLM's Biologist and the CPM, in consultation with CDFG and USFWS determine whether more years of monitoring are needed, and whether mitigation and adaptive management measures are necessary. After the Bird Monitoring Study is determined by BLM's Biologist and the CPM to be complete, the project owner or contractor shall prepare a ~~paper~~ report that describes the study design and monitoring results to be submitted to ~~a peer-reviewed scientific journal~~ the CPM, CDFG, BLM, and USFWS ~~. Proof of submittal shall be provided to BLM's Wildlife Biologist and the CPM~~ within one year of concluding the monitoring study.

BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT COMMISSION OF THE STATE OF CALIFORNIA
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APPLICATION FOR CERTIFICATION FOR THE
IMPERIAL VALLEY SOLAR PROJECT
(formerly known as SES Solar Two Project)
IMPERIAL VALLEY SOLAR, LLC

Docket No. 08-AFC-5
PROOF OF SERVICE
(Revised 6/8/10)

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*indicates change

DECLARATION OF SERVICE

I, Chester Hong, declare that on August 18, 2010, I served and filed copies of the attached **"Reply Brief Of Energy Commission Staff"**, dated August 18, 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: [http://www.energy.ca.gov/sitingcases/solartwo].

The documents have been sent to both the other parties in this proceeding (as shown on the Proof of Service list) and to the Commission's Docket Unit, in the following manner:

(Check all that Apply)

FOR SERVICE TO ALL OTHER PARTIES:

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

_____ by personal delivery;

__X__ by delivering on this date, for mailing with the United States Postal Service with first-class postage thereon fully prepaid, to the name and address of the person served, for mailing that same day in the ordinary course of business; that the envelope was sealed and placed for collection and mailing on that date to those addresses **NOT** marked "email preferred."

AND

FOR FILING WITH THE ENERGY COMMISSION:

__X__ sending an original paper copy and one electronic copy, mailed and emailed respectively, to the address below (***preferred method***);

OR

_____ depositing in the mail an original and 12 paper copies, as follows:

CALIFORNIA ENERGY COMMISSION
Attn: Docket No. 08-AFC-5
1516 Ninth Street, MS-4
Sacramento, CA 95814-5512
docket@energy.state.ca.us

I declare under penalty of perjury that the foregoing is true and correct, that I am employed in the county where this mailing occurred, and that I am over the age of 18 years and not a party to the proceeding.

CHESTER HONG

*indicates change