

STATE OF CALIFORNIA
ENERGY RESOURCES CONSERVATION
AND DEVELOPMENT COMMISSION

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| In the Matter of: |) | Docket No. 08-AFC-5 |
| |) | |
| Application for Certification for the |) | August 11, 2010 |
| Imperial Valley Solar Project (formerly |) | |
| known as SES Solar Two Project), |) | |
| <u>Imperial Valley Solar, LLC</u> |) | |

Staff's Imperial Opening Brief

INTRODUCTION

On July 26 and 27, 2010, the Committee assigned to the Imperial Valley Solar project (IVS project or project) held evidentiary hearings to establish a record upon which to base findings and conclusions for 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 Commission for consideration later this year. By email on August 4, 2010, Hearing Officer Renaud ruled that Opening Briefs shall be due on August 11, 2010. This is staff's Opening Brief, addressing those issues that require resolution by the Committee or have resulted in deleted, modified, or new conditions of certification.

Air Quality

The only issue that has been raised with respect to air quality is the applicant's identification in its July 21, 2010 rebuttal testimony of its proposed use of six 230 kW diesel generators to provide construction power at the project site. (Exh.131, p. 1) Staff testified that there will be no significant adverse impacts associated with the use of the proposed generators, based on the applicant's assessment of so-called "Tier 4" engines, the cleanest available. (July 26, 2010, RT 21:2-17 (Walters)). Absent additional analysis, staff could not make such a conclusion about Tier 3 engines and, therefore

recommended a Condition of Certification that would require the project owner to use Tier 4 engines.

Staff has since determined that it is unlikely that Tier 4 engines will be available from engine manufacturers at the time of the scheduled start of project construction. Therefore, staff directed the applicant to provide a revised proposal and perform a modeling analysis to show that the engine generators, along with the other construction emission sources, would not cause exceedances of the State 1-hour NO₂ standard (the one standard of concern for this engine proposal). The applicant provided a revised engine proposal that assumes Tier 3 compliant engines in place of the Tier 4 engines and completed a revised 1-hour NO₂ modeling analysis. (This analysis was provided to the Dockets and Proof of Service list for the IVS project on August 10, 2010.) Staff has reviewed this analysis and found that the maximum impacts are just under the State 1-hour NO₂ standard (modeled worst-case 1-hour impact of 185.46 µg/m³ added to staff's determined worst-case background of 152.6 µg/m³ is 338.2 µg/m³, just under the standard of 339 µg/m³). Additionally, staff reviewed the total emissions for these engines and determined that for the applicant's maximum proposed engine use, the estimated annual NO_x and PM₁₀ emissions would remain below General Conformity applicability thresholds. Staff has determined that the condition of certification AQ-SC 9 is necessary to ensure that these engines will comply with the applicant's proposal and impact assessment and not create significant NO₂ impacts or exceed General Conformity applicability thresholds. New AQ-SC 9 is included in Appendix A to this brief, along with a clarifying correction to AQ-SC3.

Alternatives

1. The Commission Should Not Approve a Draft LEDPA that has not been the Subject of Thorough Analysis of Potential Impacts and Feasible Mitigation that May be Needed.

The Energy Commission is required to consider alternatives to the IVS project that would meet project objectives, but avoid or mitigate significant adverse environmental impacts associated with the project. (Public Resources Code, § 21100, subd.(b)(4).) Staff therefore completed an analysis of 27 alternative sites meeting those criteria, as well as alternative sizes and technologies. Staff's screening analysis of these alternatives

concluded that 20 were clearly infeasible or incapable of meeting project objectives and were, thus, removed from further consideration. The remaining seven alternatives were examined in detail. (Exh. 302, p. B.2-1.)

Because significant drainage impacts and impacts to biological resources were identified early in the process, staff focused its analysis on those alternatives that could lessen or avoid those impacts. Staff worked closely with the United States Army Corps of Engineers (USACE) to develop these alternatives. For the IVS project, USACE is responsible for identifying the Least Environmentally Damaging Practicable Alternative (LEDPA) as part of a federal statutory scheme to minimize impacts to waters of the United States. (33 U.S.C. § 1344, 40 C.F.R. § 230.1 et seq.) This alternative will be included in the federal Record of Decision that the Bureau of Land Management (BLM) will issue when it makes a decision about whether to grant a Right of Way for the project. As a result of consultation with USACE, staff identified and analyzed two “drainage avoidance alternatives”, as well as a reduced acreage alternative, several off-site alternatives and alternative technologies. USACE continued to refine the LEDPA while staff went ahead and included the two drainage avoidance alternatives in the group of seven potentially feasible alternatives to complete its in-depth analysis.

Staff’s alternatives analysis is a comprehensive, in-depth analysis of potential impacts of alternatives in each of the same 20 technical areas that are considered in the staff assessment of the project. When the USACE issued a Draft LEDPA on July 16, 2010 (Exh. 129), staff did not have sufficient time to conduct the same in-depth analysis of that alternative to determine whether the Draft LEDPA would cause impacts not already identified in the staff’s analysis of the project and alternatives.

Applicant has requested that the Committee base its PMPD on the Draft LEDPA. While staff agrees that the Draft LEDPA appears to result in impacts to a similar amount of acreage as staff’s Drainage Avoidance Alternative #1, it does so by different means. The LEDPA reduces the number and width of roads compared to Drainage Avoidance Alternative #1 (July 27, 2010, RT 361:12-25 (Fitzgerald)), but actually affects seven of the ten drainages that would be completely avoided by Drainage Alternative #1. (Exh. 302, p.B.2-15; Exh. 129, p. 23.). Moreover, at the evidentiary hearings, the applicant was unable to answer questions about impacts, for example, whether the removal of numerous spur roads leading to thousands of individuals Suncatchers would affect air

emissions associated with the project. (July 27, 2010, RT 377:7-12 (Fitzgerald).) In addition, staff notes that a final LEDPA may not be identified by the USACE until immediately before the Record of Decision, which is currently scheduled for later this year.

For the Commission to rely on the Draft LEDPA, there would need to be in the evidentiary record a thorough analysis of the impacts (or lack thereof) of the supposedly “least environmentally damaging practicable alternative.” Instead, the record lacks such an analysis. As noted at hearings, staff will respond to a Committee request that staff evaluate the Draft LEDPA and inform the Committee of its recommendations about the need for any additional analysis and/or mitigation that would be required to allow Commission approval based on the Draft LEDPA.¹ (July 27, 2010, RT 126: 6-8 (O’Brien).) These recommendations would provide the Committee with some idea of potential differences between the project alternatives that staff has reviewed and the alternative that may ultimately be approved by the USACE.

2. The Applicant’s Claims About the Economic Feasibility of Various Alternatives Have Been Contradictory and Are Not Supported By Substantial Evidence.

The applicant has made a series of claims over the evolution of this project about economic feasibility that are difficult – if not impossible – to substantiate. Applicant persists in claiming that Drainage Avoidance Alternative #1, which has been identified by staff as the preferred alternative because of its ability to significantly minimize impacts to drainage and biological resources, is infeasible due to its effect on project economics. However, staff notes that the just a few months ago, the applicant claimed that alternatives with a generating capacity of less than 750 MW would be impracticable. (Exh. 115, Supplemental Prepared and Rebuttal Testimony of Mark Van Patten, question 10.) Now the applicant claims that a 709 MW project *is* feasible, but that anything smaller is not. (Exh. 129, p. 28.) The only evidence provided to support this claim is a statement that Drainage Avoidance Alternative #1 would increase the cost per kW by \$100 over the proposed project, and would increase the total cost by \$60,600,000 as compared to building 606 MW at the costs for the 750 MW proposed project. (Exh. 129, p. 35.) It is not clear to staff what those dollar figures mean or how

¹ Staff anticipates that there could be a need for mitigation measures that are not included in the final LEDPA, due to the different environmental responsibilities imposed by state and federal law.

they were derived. In any event, if the size of a practicable project can change from the 900 MW that was initially proposed, to 750 MW in May, and to 709 MW six weeks later, staff finds it hard to have any more confidence in the July numbers than the May numbers.

Staff is also troubled by the fact that the applicant has agreed to enter into a 300 MW power purchase agreement (PPA) with San Diego Gas and Electric Company for a project that it now testifies is infeasible. (July 27, 2010, RT 463: 8-16 (Van Patten).) In fact, the applicant witness even said that it would not build the very 300 MW project for which it has a PPA. (*Id.* at 477: 5-11.) This testimony underscores the considerable uncertainty surrounding the publicly available information about the feasibility of projects using this technology. In sum, staff is not confident that the applicant has presented a convincing assessment of feasibility. We see no reason to conclude that the slightly smaller Drainage Avoidance Alternative #1 is economically infeasible, and continue to believe that absent evidence that the LEDPA avoids the significant impacts avoided by Drainage Avoidance Alternative #1, it should be the project approved by the Commission.

Biological Resources

1. Mitigation under CEQA for the Loss of Flat-Tailed Horned Lizard Habitat Requires Both Habitat Acquisition and Long-Term Management and Maintenance Funding.

The applicant does not dispute staff's conclusion that the loss of over 6,000 acres of Flat-tailed Horned Lizard ("FTHL") habitat caused by the project is a significant adverse environmental impact that requires mitigation under CEQA. (Exh. 132), pp. 1-2; Exh. 142, Q&As 7 and 8.) The principle dispute on the subject of FTHL habitat mitigation concerns the amount of mitigation. (July 27, 2010, RT 9:16-20 (Gallagher).) The applicant argues in favor of a 1:1 mitigation ratio as set forth in the Flat-tailed Horned Lizard Interagency Coordinating Committee's ("ICC's") *Flat-tailed Horned Lizard*

Rangewide Management Strategy (2003 Revision) (“RMS”)² while staff and the wildlife agencies maintain that adequate mitigation for the loss of over 6,000 acres of FTHL habitat requires both 1:1 land acquisition, including all associated land acquisition costs, as well as costs for long-term management and maintenance (“LTMM”). Staff’s requirement of the LTMM fee is based on significance of the loss of habitat, not on the loss of individual FTHLs. (July 27, 2010, RT 255:17-21, 256:9-12, 257:17-18 (Nishida).)

Applicant argues that mitigation in accordance with the RMS is sufficient to mitigate the Project’s impacts to less than significant as required by CEQA. Applicant bases its argument on a December 7, 2009 letter from the U.S. Bureau of Land Management (“BLM”) (Exh. 123), which references mitigation in RMS. This reference to the RMS was made by a federal agency that is not subject to CEQA and cannot be relied upon as an indication of CEQA conformity for mitigation. The state and federal agencies are responsible for conformity with different laws that contain separate mitigation requirements and different levels of mitigation. (July 27, 2010, RT 160:8-14 (Fesnock).)

Moreover, although the California Department of Fish and Game participated in the ICC, there is no evidence that the RMS was designed to mitigate impacts pursuant to CEQA. Indeed, the RMS is not even designed to meet the requirements of the Endangered Species Act (“ESA”) or the California Endangered Species Act (“CESA”), neither of which laws currently applies to FTHL. The RMS’s objective was, instead, to “reduce threats to a candidate species or its habitat, possibly lowering the listing priority or eliminating the need to list the species.” (RMS, p. 24.) It is important to note that the RMS has not been able to reduce the threats to the FTHL, and that as a result, threats to the FTHL’s habitat are so severe and its continued survival are so much in jeopardy that the U.S. Fish and Wildlife Service (“USFWS”) is well into the process of potentially relisting the FTHL as a threatened Species under the Endangered Species Act (“ESA”). (See

http://www.fws.gov/southwest/es/arizona/Documents/SpeciesDocs/FTHL/FTHL_reinstatement_2010_FR_3-2-10.pdf.)

² Staff files concurrently with this brief a request that the Committee take judicial notice of the RMS, to which both Staff’s and the Applicant’s testimonies make reference and on which the Applicant’s testimony relies.

The RMS sets forth a standard land acquisition ratio of 1:1 for lost FTHL habitat outside of habitat designated through the RMS as Management Areas (“MAs”). The RMS mitigation does not consider the factors that staff does in determining the threshold of significance under CEQA, such as the size of the project and extent of impacts, the quality of habitat on the project site, the listing status of the species involved, or other factors. (RMS, p. 60; July 27, 2010, RT 165:19-24; 165:25-10 (York).) CEQA requires that an agency approving a project must make findings that the changes incorporated imposed on the project mitigate the environmental impacts to a level that is less than significant. (Pub. Resources Code, §§ 21002, 21081, subd. (a); CEQA Guidelines, Cal. Code Regs., tit. 14 (“CEQA Guidelines”), §§ 15002, subd. (a)(3), 15021, subd. (a)(2), 15091, subd. (a)(1).) Nothing in CEQA or its Guidelines precludes an agency from finding that acquisition and long-term maintenance and management is required to ensure minimization of impacts, as long as the mitigation is feasible, has a nexus to the impact, is proportional to the impact, and the agency has assurances that the mitigation will be accomplished in a reasonable time. (See, e.g., *Habitat Trust for Wildlife, Inc. v. City of Rancho Cucamonga* (2009) 175 Cal.App.4th 1306 (both acquisition and endowment fulfilled requirements of non-CESA, CEQA-only mitigation.) Nothing in CEQA, therefore, prevents the Commission from requiring both land acquisition and LTMM costs to mitigate the significant impacts caused by the loss of over 6,000 acres of FTHL habitat. In fact, if, as staff recommends, the Commission finds that LTMM funds are required to ensure that the mitigation remains effective, the Commission *must* include them in any decision approving the project unless payment of the funds renders the project infeasible.

Mitigation measures must be roughly proportional to the project’s impacts. (CEQA Guidelines, § 15126.4, subd. (a)(4)(B); *Napa Citizens for Honest Gov’t v. Napa County Bd. of Supervisors* (2001) 91 Cal. App. 4th 342, 360.) The record evidence demonstrates that adherence to the RMS’s recommended 1:1 mitigation ratio for impacts outside of the MAs is insufficient to mitigate the loss of FTHL habitat to a level that is less than significant under CEQA. As a species, FTHL has lost approximately 49% of its original habitat since anthropogenic activities began in the “relatively small” distribution area of FTHL. (RMS, p. 11.) Listing is proposed primarily due to the loss of habitat. (July 27,

2010, RT 285:22-286:4 (Cashen).) Solar projects such as this one are unprecedented in size in the FTHL habitat. (July 27, 2010, RT 142:9-17 (Fesnock).) This fact alone should preclude the Commission's reliance on the RMS alone in determining mitigation, because the RMS's "standard formula" for mitigation never contemplated impacts as extensive as those presented by the Project. Moreover, FTHL recovery period is very long. (See RMS, p. 11.) These facts, combined with the need to manage suitable habitat in order to promote recovery of the lost individuals, justify the payment of long-term management fees, which will ensure that the mitigation will be effective in addressing the impacts in accordance with CEQA.

"The goal of compensation is to prevent the net loss of FTHL habitat and make the net effect of a project neutral or positive to FTHLs by maintaining a habitat base for FTHLs." (RMS, p. 61.) Although the Strategy contemplates accomplishing this goal via 1:1 mitigation for lost habitat outside of a FTHL MA, 1:1 mitigation does not make the project neutral or even reduce the impacts to less than significant. This may be one reason that the RMS has not been as effective as intended in reducing threats to FTHL. Long-term management and maintenance of the acquired habitat ensures long-term viability of the habitat, especially as actual mitigation of impacts for lost habitat must be monitored. The stated Overall Goal of the RMS is to "maintain self-sustaining populations of Flat-tailed Horned Lizards in perpetuity." (RMS, p. 24 (emphasis added).) Acquisition of habitat for the purposes of mitigation is inextricably tied to the need to fund the long-term management, monitoring, and maintenance of the lands. Actions fundamental in sustaining FTHL habitat such as habitat enhancement, weed management, garbage clean-up, and regulating off-highway vehicles are required to ensure that habitat acquired to offset impacts (i.e., mitigation) provides conservation value for the species *in perpetuity*. (July 27, 2010, RT 141:12-20, 149:6-13 (Fesnock); July 27, 2010, RT 168:25-169:6 (York).) It is worth noting that BLM cautions that management and maintenance funds for the MAs are only "theoretically" included in its annual budget – that LTMM funds are not specifically apportioned for the FTHL MAs. (July 27, 2010, RT 141:6-11, 159:20-25 ("And we can only do the actions that we have federal funding, funding from Congress to do. And those monies don't change very much from year to year.") (Fesnock).)

Furthermore, acquisition of MA inholdings will not sustain or increase the amount of FTHL habitat. BLM proposes replacement of the lost habitat on the project site by acquiring in-holdings in the FTHL MAs. (July 27, 2010, RT 22:13-18 (Gallagher); RT 176:15-22 (Fesnock).) The Committee can reasonably assume that these inholdings are occupied by FTHL. (RMS, p. 60 (“However, if the project area contains both suitable and unsuitable habitat, agency biologists may base compensation on the entire project area because FTHLs may use unsuitable habitat (e.g., paved or dirt roads or fringes of agricultural fields) adjacent to suitable habitat.”).) As such, mitigation for the loss of active habitat with active habitat will result in the net *loss* of FTHL habitat. This violates the goal of the RMS as well as CEQA.

The Commission would be misguided, and would fail to comply with CEQA, if it were to ignore significant impacts to the FTHL simply because it is an unlisted species and conclude that adherence to the RMS is adequate. The FTHL is a BLM special-status species, and the USFWS has recently closed the comment period for the reinstatement of a 1993 proposed rule to list the FTHL as a threatened species under ESA. (http://www.fws.gov/southwest/es/arizona/Documents/SpeciesDocs/FTHL/FTHL_reinstatement_2010_FR_3-2-10.pdf) Upon cross-examination, Applicant suggested that mitigation in conformity with the RMS would constitute “defensible mitigation.” (July 27, 2010, RT 21:19-22:3 (Gallagher).) This is not a reasonable conclusion for a CEQA analysis, however. The dramatic reduction in FTHL habitat, its status as a BLM sensitive species, and the fact that the USFWS may be on the cusp of listing the FTHL as Threatened warrants measures above and beyond those in the 2003 RMS.

Because staff is attempting to “nest” CEQA mitigation requirements with those of BLM and USFWS as required under federal law, BLM’s use of the RMS is naturally part of staff’s recommendations for mitigation. (RT 258:23-259:8 (Nishida); RT 259:17-22 (Steward).) However, CEQA requires a greater degree of mitigation than that under the RMS, and CEQA mitigation cannot be designed solely on the basis of the RMS. Staff has regularly recommended both LTMM fees and land acquisition for the significant loss of habitat pursuant to CEQA (July 27, 2010, RT 170:14-17 (York)), and, for the mitigation to be effective under CEQA, the Commission should require both acquisition and LTMM fees for the loss of over 6,000 acres of FTHL habitat. Although the LTMM

fees in this case do not arise from BLM's requirements, there is no guarantee that all mitigation lands will be donated to BLM. In any event, the LTMM fees in this case address CEQA mitigation requirements.

2. Loss of Connectivity between the West Mesa and Yuha Desert FTHL MAs Is a Significant Unmitigable Impact, but Approval of the Drainage Avoidance #1 Alternative Would Reduce the Impacts to Less Than Significant.

The significant adverse impacts to FTHL connectivity between two FTHL MAs would be mitigated to less than significant levels under CEQA under the Drainage Avoidance #1 Alternative, under which the applicant would avoid the ten primary drainages the proposed Project would occupy. (Exh. 302, pp. C.2-73-74.) Applicant does not dispute staff's assessment that the proposed Project's impacts to FTHL connectivity are substantial and unmitigable, but it states that avoidance of Drainage C pursuant to the Draft LEDPA would mitigate the impacts to less than significant. (Exh. 142, Q&A 6.) As discussed above, staff will analyze the Draft LEDPA if directed by the Committee. As noted above, the Draft LEDPA would allow impacts to seven of the ten drainages avoided by Drainage Avoidance Alternative #1 and without having independently analyzed the Draft LEDPA and determined whether it would avoid the major washes necessary for FTHL connectivity, staff cannot address applicant's claim and continues its support of Drainage Avoidance #1 Alternative.

3. The Loss of Individual FTHL Is a Significant Unmitigable Impact.

Staff and the applicant disagree on whether the deaths of individual FTHL caused by the project is a significant impact under CEQA. (Exh. 142, Q&A 5.) The Applicant is indifferent to the loss of any number of individual FTHL, even thousands, as long the loss and mitigation are consistent with the RMS. (July 27, 2010, RT 246:2-247:9 (Mock).) Staff, however, views the loss of up to more than 1,000 FTHL as significant. The applicant disagrees with staff's estimate, and the USFWS estimate on which it is based.

USFWS estimates the loss of approximately 1,300 to 2,000 FTHL in the project area. (Exh. 302, p. C.2-41; July 27, 2010, RT 204:16 (Sirchia)³.) The Applicant, on the other hand, bases its estimate on a survey protocol and calculation method that was never intended to determine density and that, in point of fact, does not determine density of FTHL at all. (July 27, 2010, RT 203:23-204:16 (Sirchia), 207:3-10 (Steward).) The applicant used only detection, or “absence-presence,” surveys. (Exh. 142, Q&A 4.) Staff and USFWS relied on the Grant and Doherty study⁴, which cautions against relying on detection surveys to estimate density. “[T]he low detectability of this lizard indicates that potentially many more lizards are present than are detected. Raw counts fail to account for detection probability, often resulting in biased estimates and misleading results” that underestimate density. (Grant and Doherty study, p. 1050.) The Grant and Doherty study, in contrast, used both closed mark-recapture methods and distance sampling (with adjustments for the cryptic nature and low density of the species) to determine “detection probability” and abundance (or density) and produce the first and, to date, only large-scale abundance estimates of FTHL. (*Id.*, pp. 1050, 1054; *see also* Public Comments of Laura Cunningham, July 27, 2010, RT 290:18-291:1.)

Applicant distorts the conclusions one can draw from absence-presence surveys. The RMS mentions, “Negative FTHL survey results in the project area shall be irrelevant in the determination of whether to charge compensation because FTHLs can re-occupy the suitable FTHL habitat in the future, or FTHLs were present but not detected due to their cryptic nature.” (RMS, p. 60.) The applicant, however, did just that. The applicant conducted absence-presence surveys to determine the “distributional relationship, how much of the site was potentially occupied” (July 27, 2010, RT 245-8-10 (Mock)), and yet Dr. Mock is relying only on the actual number of FTHLs actually detected (“I can only

³ Because of federal regulatory and policy limitations, all statements made by representatives from the BLM and USFWS at the July 27, 2010 evidentiary hearing are not sworn testimony; they are made for informational purposes to aid the parties and the Committee.

⁴ Staff requests that the Committee take official notice pursuant to Cal. Code Regs., tit. 20 § 1213 of the Grant and Doherty article, to which both Staff’s and the Applicant’s testimonies make reference and on which Staff’s testimony relies. (Grant, T. and Doherty, P., “Monitoring of Flat-Tailed Horned Lizard With Methods Incorporating Detection Probability,” *Journal of Wildlife Management*, (2005) 71(4), pp. 1050-1056 (“Grant and Doherty study”).)

rely on the positive data” (July 27, 2010, RT 246:11 (Mock))). Absence-presence surveys are not designed to provide numbers of organisms, and Dr. Mock admits the shortcomings of his survey when compared with the Grant and Doherty study. (RT 251:22-252:7 (Mock).)

Staff concedes the difficulty of determining the threshold of significance for the loss of individuals. (RT 252:21-253:3 (Nishida).) Staff did not rely strictly on the Grant and Doherty study to determine the loss of an estimated 1,300 to 2,000 individual FTHLs. Staff’s original estimate of a loss of 2,000 to 5,000 FTHLs in the Supplemental Staff Assessment (Exh. 302) was modified after conferring with the USFWS and considering the acres affected and site characteristics, and the number was reduced as set forth in the Supplemental Staff Assessment (Exh. 302). Numbers of FTHL estimated using occupancy surveys are designed to determine abundance and densities of FTHL; the only reliable data and the “best available data” for the project site, according to the wildlife agencies, is the Grant and Doherty study. (RT 204:10-16 (Sirchia).) The record evidence indicates that many FTHL will die as a result of this project. That is a significant adverse impact.

4. CEQA Requires LTMM for Impacts to 881 Acres of Peninsular Bighorn Sheep Foraging Habitat.

Applicant disagrees with Staff’s assessment that the project will cause a significant adverse impact on the foraging habitat of Peninsular Bighorn Sheep (“PBHS”) as well as with the number of acres of habitat affected. (Exh. 142, Q&As 13 and 14.) Although applicant agrees that compensatory mitigation for the loss of foraging habitat will benefit PBHS, it contends that mitigation for the project’s impacts to Waters of the U.S. will serve that purpose. (*Id.*)

Where nesting is possible and provides demonstrable benefits, staff is supportive of such nesting. Staff and CDFG generally support enhancement of 247 acres along Carrizo Creek to mitigate for impacts to Waters of the U.S. and Waters of the State, but the evidence does not support a finding that such action would adequately mitigate the impacts to the foraging habitat of PBHS. CEQA requires the Commission to identify

mitigation measures “for each significant environmental effect identified in the EIR.” (CEQA Guidelines, § 15126.4, subd. (a)(1)(A).) At issue is the permanent loss of PBHS foraging habitat, and restoration at Carrizo Creek would provide only a temporary benefit. Applicant proposes to manage tamarisk removal at Carrizo Creek for only five years. (July 27, 2010, RT 110:1-4 (Mock).) To ensure that the benefits to the PBHS habitat would be effective and not merely temporary, sufficient mitigation under CEQA should include the payment of LTMM fees for the maintenance of mitigation lands in perpetuity.

Staff’s analysis demonstrates that the project would impact 881 acres of Waters of the U.S., and this figure includes PBHS foraging habitat. (Exh. 302, pp. C.2-22, C.2-71.) Applicant asserts that the project would impact only 247 acres of PBHS foraging habitat based on the California Rapid Assessment Method (“CRAM”) analysis. (Exh. 142 , Q&A 14; July 27, 2010, RT 55:10-13 (Mock).) Staff, however, has not conducted factual analysis of the Draft LEDPA or associated CRAM and cannot at this time specify impacts and mitigation that may be required for the Draft LEDPA in accordance with CEQA. CEQA requires an independent analysis of the proposed project. (Pub. Resources Code, section 21100, subd. (a).) The environmental analysis must contain, among other things, a project description detailing the precise location and boundaries of the proposed project (section 15124), and a discussion of significant environmental impacts, including “relevant specifics of ... alterations to ecological systems” (section 15126.2, subd. (a)). Neither the applicant’s project nor staff’s analysis of alternatives includes the Draft LEDPA or associated CRAM. (In fact, applicant admitted in late July 2010 that it had been working with the U.S. Army Corps of Engineers on the Draft LEDPA only over the “last couple of months.” (Exh. 143, Q&A 10.) As discussed above, staff will conduct an independent analysis of the Draft LEDPA and its impacts on Waters of the U.S. and Waters of the State if requested to do so by the Committee. Absent such analysis by staff, the Commission should make its final determination regarding impacts to Waters of the U.S. and Waters of the State and to PBHS foraging habitat on Exh. 302, Staff’s Supplemental Staff Assessment. Assuming the Commission approves the Drainage Avoidance #1 Alternative, staff and CDFG recommend requiring acquisition and enhancement of and LTMM fees for 881 acres of ephemeral wash foraging habitat.

5. CEQA Requires the Commission to Determine the Feasibility of Special-Status Plant Avoidance Requirements.

Applicant's proposed changes to BIO-19 would have the project implement avoidance and minimization measures for special-status plants only "as practicable," otherwise compensatory mitigation would be allowed. (Exh. 137.) Applicant would have the Commission's Compliance Project Manager ("CPM") and applicant (e.g., designated biologist) determine whether avoidance is practicable. (July 27, 2010, RT 32:3-6, 32:11-20 (Gallagher).)

The Commission, not the CPM, must determine whether or not avoidance is feasible; this cannot be decided post-decision. "While staff may draft the necessary findings, the decision-making body is responsible for the ultimate determination of feasibility, which cannot be delegated." (*California Native Plant Society v. City of Santa Cruz* (2009) 177 Cal. App. 4th 957, 999, *citing* CEQA Guidelines, § 15025, subd. (b)(2); see *also* CEQA Guidelines, § 15091, subd. (a)(3).) It would be legally indefensible for the Commission to delegate this decision-making authority to the CPM.

It is also clear that the evidence does not support applicant's assertion that it is infeasible to avoid 75% of Critically Imperiled (CNDDDB Rank 1). (Exh. 132, p. 3.) Plant surveys to date have indicated that most detections of Brown turban occur along the perimeter of the Project site. (Applicant's Submittal of Late Spring Botany Report (June 11, 2010), Figure 2.)⁵ Staff is requiring a 10-20 foot avoidance of Special Status Plants detected to date that are *outside* of the Project Disturbance Area and within 100 feet of the Permitted Project, and avoidance of 75% of Critically Imperiled plants detected from late summer/early fall surveys. (Exh. 303, pp. 26-27, 32 (Corrected condition of certification BIO-19).) There is no independent evaluation in the record to indicate that avoidance of Special Status Plants under these terms is infeasible, particularly when avoidance is likely to occur at the IVS project site boundary. Based on discussions at the July 10, 2010 Committee-sanctioned workshop, staff is hopeful that the applicant and other parties can agree to a revised condition of certification BIO-19 that would remove

⁵ Staff is uncertain of the Exhibit number for this report.

the applicant's proposed "as practicable" language that would modify the avoidance requirements.

6. Inclusion of Burrowing Owls, Golden Eagle, American Badger, and Desert Kit Fox in BIO-10 Does Not Increase the Dollar Amount for Compensatory Mitigation, But It Does Allow Nesting of Any Necessary Mitigation.

Burrowing owls and American badger are species of special concern; desert kit fox is protected under Title 14, California Code of Regulations, § 460, which contains no allowance for take. Staff's proposed conditions of certification require preconstruction surveys for burrowing owls (BIO-16), American badger and desert kit fox (Bio-15), which will be used to determine whether the species are on site. Although mitigation for impacts to burrowing owls, Golden Eagle, American badger, and desert kit fox were included in condition of certification BIO-10, there has not been an increase in the mitigation requirements or compensatory mitigation for FTHL impacts to mitigate for the impacts to these species, as the applicant has mistakenly inferred. (*See, e.g.*, Exh. 142, Q&A 10.) Including of these species in BIO-10 was done with the intention of promoting nesting of mitigation.

7. Staff's Recommended Speed Limits Would Give Applicant an Opportunity to Avoid Individual FTHL Mortality.

Applicant opposes staff's proposed 15 mph speed limit on both paved and unpaved roads. (Exh. 302, **BIO-6**.) Applicant instead proposes speed limits of 25 mph on paved roads and 10 mph on unpaved roads. (July 27, 2010, RT 16:14-17 (Gallagher).) Staff still maintains that a 15 mph speed limit on stabilized roads is necessary to prevent additional FTHL mortality, although it would accept a 10 mph limit on unpaved roads. While 25 mph may be acceptable where species that scurry out of the way of vehicles and equipment, the FTHL freezes (July 27, 2010, RT 42:21-25 (Mock)), which necessitates a lower speed limit. Applicant assumes that the FTHL will be run over by the vehicle. (July 27, 2010, RT 42:17-25 (Mock).) Staff, however, assumes that the lower speed limit will allow the vehicle driver to maneuver around the FTHL to avoid it. (July 27, 2010, RT 208:9-209:2.) Staff's assumption is consistent with the applicant's proposal for the

“construction-monitoring protocol” and avoidance measures. (July 27, 2010, RT 86:6-9 (Mock); July 27, 2010, RT 208:11-15 (Nishida).)

At the August 10, 2010 Committee-sanctioned workshop, staff and applicant may have reached a conceptual agreement on the speed limits for the project site. This conceptual agreement will be refined through language developed before next week’s hearing. It would allow speeds of 25 mph on paved roads, and speeds of 10 mph on unpaved roads, require the project owner to report information about the locations and number of FTHL roadkill, habitat quality where roadkill are found, time of the year and rate of roadkill, and other information that will be included in the BRMIMP required pursuant to BIO-7.

8. Impacts Caused by and Mitigation for Upgrades to the SWWTF Cannot Be Determined Until Completion of August 2010 Surveys.

The record does not contain an independent analysis of biological impacts caused by the SWWTF upgrades, but staff believes that impacts not already identified in the Initial Study prepared for the project will be unlikely. (Exh. 302, p. C.2-3.) However, should the assessment from the hydrologic study and protocol bird surveys (to be completed in August 2010) indicate impacts to wetland/riparian habitats or nesting of special status birds, then BLM would need to initiate ESA Section 7 consultation with USFWS for migratory and Special Status birds, and staff, with the support of CDFG, would possibly require acquisition of like habitat or restoration/enhancement along the New River.

9. The Project Will Result in Unmitigable Noise Impacts on Wildlife.

The project will cause unmitigable noise impacts on biological resources. The applicant asserts that the noise level at the edges of the Project site would not exceed 74 decibels (db). (July 27, 2010, RT 44:12-13 (Mock).) This estimate is based on measurements made at the 60-Suncatcher site at Maricopa, Arizona. (July 27, 2010, RT 44:14-16 (Mock).) Based on the applicant’s own AFC, however, the noise level in the field of nearly 30,000 Suncatchers could reach as high as 84 db. (Exh. 1, § 5.12.2.2; Exh. 302, pp.

C.2-86 to C.2-88; July 27, 2010, RT 224:6-7 (Nishida).). It is likely, and there is no evidence to the contrary, that the operational noise level from individual Suncatchers would be additive and, in combination, would exceed the level of noise applicant contends will reach. (July 27, 2010, RT 233:21-24, 239:11-16 (Bright).)

The noise level of the project would adversely impact the nesting habits of migratory and special status birds such as the burrowing owl, the horned lark, Loggerhead shrike, blacktailed gnatcatchers, and Leconte's thrasher. (Exh. 302, pp. C.2-86-88.) As well, despite the fact that the applicant twice affirmed that the site would be "biologically lost" (RT 41:7-8; 43:25-44:2 (Mock)) as a result of the IVS project development, the applicant does not dispute that the project site is a connectivity corridor between the West Mesa and Yuha Desert FTHL MAs. (Exh. 116.) Insofar as Drainage Avoidance #1 Alternative or the LEDPA would avoid most of the major ephemeral washes, staff and applicant agree they could and should continue to act as FTHL movement corridors and other wildlife habitat. Noise levels such as those that would occur in the middle of the project site containing nearly 60,000 Suncatchers and associated maintenance and repair vehicles, would have a highly deleterious effect on the individuals in the avoided washes – and may even adversely affect the connectivity function of the avoided washes. This is a significant unmitigable noise impact on the migratory birds and other wildlife that will use the avoided washes in the middle of the project site as habitat.

10. Applicant's Request to Phase Payment of Compensatory Mitigation Must Be Based on Factual Data on the Planned Phases of Construction.

Staff is not opposed to phasing mitigation payments, but applicant's phased mitigation proposal requires factual analysis, as required by law. On August 2, 2010, staff requested that applicant provide a proposal for phased mitigation which describes the phases of construction and identifies the location and timing of construction and linears. At the August 10, 2010 Committee-sanctioned workshop, the applicant presented a thinly-sketched proposal for phased mitigation. Staff is encouraged to hear that the applicant is committed to supporting phased payment of compensatory mitigation keyed and prior to the occurrence of ground disturbing activities (rather than payment keyed to financial closing), and staff looks forward to reviewing a more

fully developed plan of phased mitigation. As always, staff encourages the Commission to be vigilant in ensuring that implementation of mitigation does not lag behind the creation of impacts.

11. Issues on Which Applicant and Staff Agree or Do Not Dispute

Applicant and staff agree to modify BIO-8 to remove garbage from the site “regularly to prevent overflow”, rather than a daily pickup.

Applicant and staff agree to restrict the use of soil tackifiers on roads crossing Waters of the U.S.

Applicant and staff agree to allow equipment maintenance in designated maintenance areas that are within 150 feet of any ephemeral drainage.

Applicant agrees to staff’s condition to publish findings from the Before-After Control-Impact Occupancy Estimation study on FTHLs (BIO-9) and the Bird Monitoring Study on the effects of solar technology on birds (BIO-21).

Hazardous Materials Management

Although there was no live testimony on Hazardous Materials Management presented at the evidentiary hearings, the applicant did propose changes to various conditions of certification in Exhibit 122. This section of the brief contains staff’s responses to those proposed changes.

The change to the verification for **HAZ-2** is acceptable. The change to **HAZ-5** is not acceptable because *all* employees will be working in and around the various components of the hydrogen system. In other words, not only those employees whose responsibilities include handling of hydrogen will have access to the hydrogen system and have the opportunity to instigate considerable damage to equipment and employees. The change to **HAZ-7** is acceptable. A copy of the conditions with these changes is included in Appendix A to this brief.

Hydrology

1. Water Supply Impacts Associated with Both Residential Water Use and Storage are Significant and, while the Former Can be Mitigated, the Latter Cannot.

The water supply for the IVS project has changed considerably during the licensing process. Although the applicant has indicated that it would like to use recycled water that will be available when an upgrade to the Seeley Waste Water Treatment Facility (SWWTF) is completed, there is no certainty about when that water will be available. Although staff anticipates that the SWWTF project will be permitted and constructed in the near future, there is a possibility that environmental impacts will prove more challenging than anticipated and delay the completion of the project. As a result of the fact that water from SWWTF will be unavailable when project construction may commence this fall, the applicant proposed the use of water from the Boyer well in the interim. Staff has completed an analysis of both water supply options. Based on the information presented to date, staff concludes that the SWWTF will require mitigation, but that unmitigable significant impacts are unlikely to occur. (Exh. 302, C.2-3.) However, the use of the Boyer well, which has a permitted capacity of 40 acre-feet per year (afy) does create potentially unmitigable impacts, both to residential users of the well and the groundwater basin itself, which is in a state of overdraft. These points are explored in detail below.

a. *Local Residents Depend on the Boyer Well and a Conservative Approach to Determining the Acceptable Level of Project Use of this Water is Essential.*

There is no dispute that the Boyer well has historically provided and continues to provide water for residents who may have no other source of supply. (July 26, 2010, RT 211: 13-17 (Fio); 177:12-16 (Boyer).) There is also no dispute that the evidence regarding the amount of water pumped from the well that is used for residential purposes is extremely limited. However, there *is* dispute about how to interpret this evidence in determining the conditions that should apply to the use of Boyer well water by the IVS project.

In the Supplemental Staff Assessment and in its oral testimony at hearing, staff explained that it considered the monthly historical water sales data reported for the Boyer well for the months of 1990 – 2004. (Exh. 302, p. C.7-52-53; July 26, 2010, RT

221:20-25 – 223:1-23 (Fio).) Staff used this information to estimate the amount of water that was being used by local residents. Although the amounts are quite variable, staff derived a conservative estimate of 6 afy of residential water use. Staff calculated this amount by doubling the average amount of water use for the months of February; February was chosen because it showed the lowest average sales and because construction and dust suppression uses are probably minimal at that time. (Exh. 302, p. C.7-40) The doubling is a conservatism, designed to ensure that local residents who may rely on the well are not at risk of losing their water supply. (*Ibid.*)

At the evidentiary hearing, Mr. Boyer also testified, stating that he has established an informal system of water sales, in which residents take water and leave payment and a record of the volumes purchased in a log. (July 26, 2010, RT 176: 9-12 (Boyer).) Mr. Boyer testified that he believes there are 3 permanent residents and 12 part-time residents who use water from his well. (*Id.* at 178:16-19.) He estimated that during the two years he has owned the well, residential use has averaged .5 afy. (Exh. 126.) Obviously, the amount of water used by residences can vary, depending on the number of people in the household, the amount of irrigation, and whether or not the water is provided through a water supply system or trucked in. Estimates presented by the experts at the evidentiary hearing ranges from .5 afy (Mr. Boyer's estimate of the average for the past two years) to 6 afy (staff's estimate based on the historical monthly data from 1990 to 2004). Staff also testified that local per capita water use for Ocotillo is estimated at 200 gallons per day, and this use applied to 3 full-time and 12 part-time residents would likely result in an amount of water in excess of Mr. Boyer's estimates. (July 26, 2010, RT 233: 2-12 (Deverel).) This testimony underscores staff's concern that the informal system employed by Mr. Boyer may result in an underestimation of the amount of water withdrawn.

Staff believes it is imperative that the Committee take a conservative approach to protecting residential water supply. There are few to no other options for the residents currently dependent on the Boyer well. Applying this principle to the limited amount of data about residential water use compels a conclusion that staff's 6 afy estimate is appropriate. Requiring the IVS project to leave this small amount of water available for residential water use is the only way to ensure that the Commission decision does not

leave local residents without water, and that impacts to these residents are not significant.⁶

- b. *The Fact that the Groundwater Basin is in Overdraft Combined with its Designation as a Sole-Source Aquifer Supports a Finding that Any Additional Withdrawals Constitute a Significant Impact.*

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, meaning that more water is being withdrawn from the basin than is recharged. (*Id.* at C.7-41.) Although the County requires registration of wells, it is not implementing a regulatory scheme based on an analysis of 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.) Several residents commented during the public comment session that there have been recent incidents of failures of residential wells. (*See e.g.*, July 26, 2010, RT 280:24 – 281:1-6; 282:5-20.) In sum, water is a scarce resource in the project vicinity, and public comment indicates that residents of local communities are increasingly challenged to find a reliable source of water.

In addition to assessing impacts of project water use on local residents (discussed above), staff identified the following types of impacts associated with water extraction: water quality impacts from upflux, impacts to wells and/or groundwater dependent vegetation, and impacts to basin storage. Staff and the applicant agree that the available analysis indicates that impacts associated with the first two types of effects will not be significant. (Staff is uncertain whether the other parties agree.) However, staff and applicant disagree about the significance of the impact to basin storage. The applicant testified that use of the Boyer well would not cause a significant impact to basin storage because the project's individual use represents a small percentage of the total amount in storage, and because it wouldn't make a measureable difference in the water levels in the basin. (Exh. 140, p.2.) However, the applicant's witness conceded that there can be measurable impacts to water levels that only occur as a collective result of pumping --

⁶ Staff acknowledges that the Commission cannot compel Mr. Boyer to sell water to local residents. However, if the Commission allows the IVS project to use all of the water from the Boyer well, we can be certain that some local residents *will* lose their existing water source.

even when each individual's activities may not have a measurable effect on groundwater levels. (July 26, 2010, RT 163:12 (Scott).) This situation is very common in overdrafted water basins, with many small incremental uses creating an impact that is significant in the aggregate.

Staff believes that water is a finite and precious resource, and that incremental use that exacerbates a significant cumulative impact should be identified as cumulatively considerable. Staff's concern is heightened by the fact that this basin is a sole source aquifer. Staff strongly disagrees with the applicant's contention that the concern the Committee should focus on is potential dewatering. (Exh. 140, p. 2.) In fact, the applicant's witness conceded that regulatory agencies should be concerned about overdraft long before dewatering occurs. (July 26, 2010, RT 165:5-7(Scott).) Staff understands that defining a "bright line" for identifying incremental contributions to cumulative impacts that are significant is challenging. When it comes to water in the desert, and a water supply that is the sole source of drinking water, staff believes a conservative approach is called for. Staff believes that this project's use of water from the Boyer well is cumulatively considerable and should be identified as a significant adverse impact.

Staff was also unable to identify any mitigation that could reduce this impact. (Exh. 302, pp. C.7-50 -51.) The applicant proposed buying twice as much water as it uses for the project and leaving that water in the ground as mitigation. But, as staff pointed out at the evidentiary hearing, this does not put the aquifer in the same condition as it would be without the project; the water used by the project is gone forever.⁷ (July 26, 2010, RT 214:4-12 (Fio).)

The discussion at the evidentiary hearing underscores staff's concerns. If current use from the Boyer well is zero, (which would be consistent with the County's testimony that use of the well was not allowable until its July 14, 2010 approval of the well

⁷ It is important to note that CEQA case law is clear that a Lead Agency should not consider a permitted use as the baseline to which project impacts are compared, unless that use was the subject of environmental review. (*Benton v. Board of Supervisors* (1991) 131 Cal.App.3d 350, [182 Cal.Rptr. 317]) In this case, no such review has occurred. The debate is solely about whether foregoing a future right to use water from the Boyer well reduces the actual impact caused by pumping for the IVS project.

registration [May 24, 2010, RT 206: 8-13 (Minnick)], the project's use of Boyer well water will increase the amount withdrawn from the aquifer over above current conditions. Leaving water that is already in the aquifer there when the SWWTF upgrades are completed will not replace the water that was used. If, on the other hand, current use from the Boyer well is 40 afy (or more), those current users of Boyer well water will need to replace their water with other sources, and the most likely source available is the same aquifer from which the Boyer well produces water. (July 26, 2010, RT 219:22-25 (Dennis).) Those users will continue to use that other source of aquifer water until water from the Boyer well becomes available again. The fact that the project owner will not pump purchased water for a portion of that time simply extends the period of time during which current users will turn to an alternative source in the same aquifer. It does not change the fact that the project has displaced water use from the well that will presumably be made up elsewhere in the aquifer.

The only mitigation that would actually eliminate the project's impact on the aquifer would be importing and recharging the aquifer with a new water source or reducing existing demand through the types of conservation programs implemented for other projects that have come before the Commission. (July 26, 2010, RT 204:18-22 (Dennis).) As noted above, both options appear to be infeasible. Thus, staff concluded that the use of Boyer well water is a significant impact and that mitigation is not feasible.

c. The Boyer Well Registration does not Violate the Restriction on Export, and Staff's Proposed Condition of Certification SOIL & WATER-10 Should Be Deleted.

Imperial County Ordinance 92203.01 prohibits export of groundwater from the County or the groundwater basin from which the groundwater is derived unless the operator has obtained a permit. Staff had originally proposed a condition of certification to prohibit use of water from the Boyer well on that portion of the IVS project property that is located over an adjacent groundwater basin. However, a representative from the County (Planning Division Manager for the Imperial County Plan Development Services Department Jim Minnick) subsequently informed staff that the current well registration for the Boyer well allows exportation to the entire project site. Therefore, staff withdraws SOIL&WATER-10, and recommends that it not be included in the PMPD.

d. Staff Accepted in Part and Rejected in Part the Applicant's Proposed Changes to Conditions of Certification SOIL&WATER-2, -9, -12.

The applicant proposed changes to SOIL&WATER-1, -2, -7, -9, -10, -11, and -12, some of which reflected the arguments discussed above. Other proposed changes appear to be in the nature of clean-up or reflect timing changes. Staff has rejected those that reflect the applicant's position regarding the significant impacts identified by staff and discussed above, but has accepted others, as well as providing clarifying edits to SOIL&WATER-5. The changes can be seen in Appendix A.

2. Erosion and Hydro-modification Impacts

At the hearing, the staff witness testified that he had not reviewed some of the more recent information provided by the applicant regarding the potential for erosion and hydro-modification. (July 26, 2010, RT 345:21-25 (Lowe).) Based on the evidence introduced into the record at the evidentiary hearing, staff continues to believe that impacts may still be significant. Although the newer information does indicate that the more recent project revisions, such as eliminating the detention basins, will reduce the adverse sediment transport impact of Suncatchers in the large washes, uncertainty continues to exist in the short term due to the reduction in sediment delivery to downstream. In fact, it appears that a short-term a reduction in sediment delivery downstream is possible even after proposed mitigation. (Exh. 30, pp. 29 -30, 38-39, 47.) Given this uncertainty, and the expected short term reduction in sediment supply, staff continues to conclude that the project may create a significant unmitigated adverse impact regarding stream geomorphology, sediment transport and associated water quality issues. This impact could be mitigated to a level that is not significant by adopting Drainage Avoidance Alternative #1.

Land Use

There was limited live testimony on the subject of Land Use, and the issues are not particularly complicated. Staff identified three issues of concern: site control, zoning consistency, and consistency with set-back requirements. Staff and the applicant agree that the project is not consistent with the S-2 zoning (for those portions of the project within county jurisdiction), and also agree that County Ordinance 90519.06 (applicable

to property located in the S-2 zone) imposes set-back requirements on the private parcels that are part of the IVS project.

Staff also identified concerns about site control, and recommends merging parcels when they are part of a single project. (July 26, 2010, RT 40:3-7 (Vahidi).) However, the applicant for the IVS project was not able to purchase 3 of the private parcels, and hence entered into lease agreements with the private property owners in order to establish site control. (*Id.* at 343:23-25 – 34:1-12 (Van Patten).) The applicant also provided evidence that it has entered into agreements with the property owners that ensure that it has the right to establish and maintain site control for the life of the project. (Exh. 130, Attachments.) As a result, staff agrees that LAND-1 can be removed from the conditions of certification. Staff also provided a recommendation to the Committee that it adopt a finding of overriding considerations (applicable to significant adverse impacts associated with recreational use identified pursuant to the California Environmental Quality Act) and a finding of public convenience and necessity (Pub. Resources Code, § 25523, subd. (d)(1).) (Staff’s Comments Regarding a Possible Energy Commission Finding of Overriding Considerations – Imperial Valley Solar Project (08-AFC-5), docketed July 27, 2010.)

Noise

NOISE-4 requires the project to avoid causing new pure-tone components. In its July 21, 2010 rebuttal testimony, the applicant requested that “pure-tone” be defined in this condition of certification and suggested a definition for “pure-tone.” (Exh.122, p. 13). Staff agrees with this definition, as it is a standard industry definition, and has revised NOISE-4 accordingly. However, in two sections of the condition, NOISE-4 also mistakenly cited the noise monitoring locations applicable to the Calico project, (SR1 and SR2) rather than those applicable to this project. The applicant proposed to delete the references and substitute “at a monitoring location acceptable to the CPM.” (*Ibid.*) Staff believes the actual IVS project monitoring locations should be identified in the condition and revised NOISE-4 to indicate these locations.

NOISE-6 for both the Calico Solar Project and the IVS project includes a time restriction requirement for construction activities. In its rebuttal testimony for both projects, the applicant requested to define “noisy construction” as construction that can create a

noise level of 75 dBA or higher (Exh.122, p. 14). As noted in the Calico proceeding, staff does not agree with this. What is noisy can vary from project to project, and staff typically uses language that reflects this fact. As a result, at the August 5, 2010 evidentiary hearing for the Calico Solar Project, staff suggested, and the applicant accepted, a revised language that includes the staff's standard definition of "noisy construction" and three options that the applicant can choose from that would allow construction beyond those time restrictions without creating a significant impact. (Calico Solar Project, Exh. 308.) Staff recommends that these revisions be incorporated into the conditions of certification for the IVS project, as well. The revised conditions of certification are included in Appendix A.

Reliability

Staff remains concerned about the long-term reliability of the Suncatcher technology. Although the recent information provided by the applicant from the Maricopa facility appears promising, staff notes that there appears to be an extremely high level of maintenance that is inherent in the operation of the facility. For example, assuming proportional maintenance requirements, the IVS project would require having 1,000 spare engines available for change-out at all times. (The applicant testified that there are 2 spare engines for 60 Suncatchers at Maricopa [July 27, 2010, RT 440:21-21(Votaw).]) In addition, the lack of detailed information about the types and frequencies of failures is a cause for concern. (*See. e.g.*, July 27, 2010, RT 435:6-13, 436:5-6, 439:12-20 (Votaw).) As a result, staff recommends a condition of certification that would require the provision of updated information about the performance of the Maricopa facility during the construction of the IVS project, and the first two years of IVS operation. This condition is included in Appendix A.

Visual Resources

At the evidentiary hearing, Staff verbally agreed to the applicant's proposed changes to VIS-1, VIS-2, VIS-3, VIS-4, and VIS-6. Staff does not oppose those changes, although it notes that the change to VIS-1 will make a significant unmitigable adverse impact even more adverse. The revised conditions of certification are included in Appendix A, along with VIS-7, revised to accept a timing modification suggested by the applicant. (Exh. 122, p. 20.)

Worker Safety and Fire Protection

Applicant and staff have stipulated to revised conditions of certification WORKER SAFETY-7 AND -8, as contained in Exh. 304. The stipulated conditions set forth three options for mitigation from which the applicant could choose. These three options are (1) a negotiated amount based upon the combined professional judgments of the Imperial County fire Department (ICFD), the project owner, and the staff; (2) an amount already determined to be adequate by the staff; or (3) an amount determined as adequate by a third-party expert following a specific protocol and guidelines. (Exh. 304.) The applicant agreed to this condition at hearing. (July 27, 2010 RT 401:3-6 (Foley-Gannon).) The new conditions are included in Appendix A.

Respectfully submitted,

/s/

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Appendix A

Appendix A

Changes to Proposed Conditions of Certification

AQ-SC3 Only paragraph b. is changed.

- b. All unpaved construction roads and unpaved operation and maintenance site roads, as they are being constructed, shall be stabilized with a non-toxic soil stabilizer or soil weighting agent that can be determined to be both as efficient or more efficient for fugitive dust control as ARB approved soil stabilizers, and shall not increase any other environmental impacts including loss of vegetation to areas beyond where the soil stabilizers are being applied for dust control. All other disturbed areas in the project and linear construction sites shall be watered as frequently as necessary during grading (consistent with Biology Conditions of Certification that address the minimization of standing water **BIO-7**); and after active construction activities shall be stabilized with a non-toxic soil stabilizer or soil weighting agent, or alternative approved soil stabilizing methods, in order to comply with the dust mitigation objectives of Condition of Certification **AQ-SC4**. The frequency of watering can be reduced or eliminated during periods of precipitation.

AQ-SC-9 The project owner shall only use Tier 3 or higher certified engine generators, totaling no more than 1,900 horsepower, to provide project site power prior to the installation of utility construction or permanent electric power lines to the project site. These engines shall be in the range of 100 to 750 hp each and will have NOx emissions that are certified under full load to be no more than 3.0 grams per brake horsepower. These engines shall be located at least 600 feet inside of the project's property fence line and total engine use for all engines shall be limited to no more than 27,360 hours or 8,400,000 hp-hrs of operation, whichever is greater. This requirement does not include small engine generators that are solely dedicated to specific pieces of equipment, such as engine generators necessary for welders.

Verification: The project owner shall submit data on the site power generators at least 15 days prior to their use that demonstrates compliance with this condition and shall submit engine use information in the Monthly Compliance Reports showing compliance with this condition's total engine use limits.

BIO-6, -8, -9, -21 Will be provided in Staff's Reply Brief

HAZ-2 COC is unchanged.

Verification: At least 60 days prior to receiving any hazardous material on the site for commissioning or operations, the project owner shall provide a copy of a final Hazardous Materials Business Plan to BLM's authorized officer and the CPM for approval.

At least 60 days prior to receiving any hydrogen on the site for commissioning or operations, the project owner shall provide a copy of a final level 3 RMP to BLM's authorized officer and the CPM for approval.

HAZ-7 COC is unchanged.

Verification: At least ~~30~~ 60 days prior to ~~construction~~ receiving any hydrogen on the ~~Project site,~~ the Project owner shall provide a copy of design drawings, documentation, and specification of the hydrogen storage and handling system reviewed and stamped by a Mechanical Engineer registered in the state of California.

NOISE-4 The project design and implementation shall include appropriate noise mitigation measures adequate to ensure that the operation of the project will not cause the noise levels due to plant operation alone to exceed an average of 45 dBA L_{eq} at the residence located at or near 1510 Painted Gorge Road. No new pure-tone components shall be caused by the project. "Pure-tone" shall be understood to mean, for purposes of this condition, a prominent one-third octave band with prominence evaluated between adjacent one-third octave band project operation sound levels and using frequency-dependent prominence ratio criteria values similar to those defined by ANSI S1.13-2005 A.8.6. No single piece of equipment shall be allowed to stand out as a source of noise that draws legitimate complaints.

When the project first achieves a sustained output of 85% or greater of rated capacity, the project owner shall conduct a 25-hour community noise survey at ~~monitoring location SR2~~ the group of residences located near 1510 Painted Gorge Road, or at a closer location acceptable to the CPM. This survey shall also include measurement of one-third octave band sound pressure levels to ensure that no new pure-tone noise components have been caused by the project.

During the period of this survey, the project owner shall also conduct a short-term survey of noise at monitoring location ~~SL4~~ ML1 or at a closer location acceptable to the CPM. The short-term noise measurements at this location shall be conducted during morning, early afternoon, and evening hours.

The measurement of power plant noise for the purposes of demonstrating compliance with this condition of certification may alternatively be made at a location, acceptable to the CPM, closer to the plant (e.g., 400 feet from the plant boundary) and this measured level then mathematically extrapolated to determine the plant noise contribution at the affected residence. The character of the plant noise shall be evaluated at the affected receptor locations to determine the presence of pure tones or other dominant sources of plant noise.

If the results from the noise survey indicate that the power plant noise at the affected receptor sites exceeds the above specified values, mitigation measures shall be implemented to reduce noise to a level of compliance with these limits.

If the results from the noise survey indicate that pure tones are present, mitigation measures shall be implemented to eliminate the pure tones.

Verification: Verification is unchanged.

NOISE-6 Heavy equipment operation, including pile driving, and noisy construction⁸ work relating to any project features shall be restricted to the times of day delineated below, unless:

the project owner obtains the consent of the respective homeowner; or

the CPM determines that the noise will not exceed the daytime ambient noise levels at ML1, ML5, and the residences near 1510 Painted Gorge Road (as shown in **Noise Table 5**) by more than 10 dBA and the nighttime ambient noise levels at those locations (as shown in **Noise Table 4**, 3rd column [L_{eq} levels]) by more than 5 dBA; or

construction that is expected to increase those daytime ambient noise levels at those locations by more than 10 dBA continues through no longer than one month or construction that is expected to increase those nighttime ambient noise levels at those locations by more than 5 dBA continues through no longer than five nights.

Mondays through Saturdays: 7:00 a.m. to 7:00 p.m.

Sundays and Holidays: No Construction Allowed

⁸ Noisy Construction: "Noise that can potentially draw legitimate complaints."

Legitimate Complaint: "A legitimate noise complaint refers to a complaint about noise that is confirmed by the CPM to be disturbing, and that is caused by the Calico project as opposed to another source. A legitimate complaint constitutes a violation by the project of any noise condition of certification (as confirmed by the CPM), which is documented by an individual or entity affected by such noise."

Haul trucks and other engine-powered equipment shall be equipped with mufflers that meet all applicable regulations. Haul trucks shall be operated in accordance with posted speed limits. Truck engine exhaust brake use shall be limited to emergencies.

Verification: Prior to ground disturbance, the project owner shall transmit to the CPM a statement acknowledging that the above restrictions will be observed throughout the construction of the project. At least 20 days prior to the start of construction activities to occur outside the above required schedule restrictions, the project owner shall submit to the CPM a letter showing the affected homeowner's consent. If the consent cannot be obtained, at least 15 days prior to the start of those activities, the project owner shall submit to the CPM documentation showing the expected construction noise levels at ML1, ML5, and the group of residences near 1510 Painted Gorge Road, the nature of the work, the time of day/night that work will occur, and the duration of the work.

LAND-1: Stricken in its entirety

SOIL&WATER-1 COC is unchanged.

Verification: No later than ~~ninety (90)~~ thirty (30) days prior to start of site mobilization, the project owner shall submit a copy of the DESCP to the County of Imperial, the RWQCB, the AO, and CPM for review and comment. The CPM shall consider comments received from Imperial County and RWQCB.

Remainder of verification is unchanged.

SOIL&WATER-2 The Imperial Valley Solar Project plans to utilize groundwater purchased from the Dan Boyer Water Company, if recycled water is not available from the Seeley County Water District for project construction. Staff assumes ~~t~~The well will provide water for project operations and construction if the Seeley Wastewater Treatment Plant supply is not available. This condition limits water purchases from the Dan Boyer Water Company to 34 acre-feet per year, and specifies that water purchases and use restrictions have been met and documented by both Imperial Valley Solar and Dan Boyer Water Company. No later than sixty (30) days before any use of water from the Dan Boyer well, ~~T~~the project owner shall document that all required metering devices are in place and maintained as required by the well owner's permit. An annual summary of daily water sales by the water purveyor differentiating between Imperial Valley Solar power purchases and other water customers (which need to be identified and which may be collectively accounted for) shall be submitted to the CPM in the annual compliance report. This report shall include copies of all the Dan Boyer Water Company invoices to Imperial Valley Solar as back-up for the reported sales and deliveries.

Verification: At least 60 ~~thirty~~ (30) days prior to use of water from the Dan Boyer Water Company for Imperial Valley Solar project, the project owner shall submit to the CPM evidence that metering devices have been installed and are operational on the Dan Boyer Water Company well. In the annual compliance report, the project owner shall provide a report on the servicing, testing, and calibration of the metering devices.

The project owner shall submit a water use summary report to the CPM in the annual compliance report for the entire time that Imperial Valley Solar is using water from this welllife of the project. As part of this report, the project owner shall include the monthly sales invoices of all sales to Imperial Valley Solar by the Dan Boyer Water Company. The monthly sales invoices shall differentiate between water sold to Imperial Valley Solar and water sold to other customers (which need to be identified and which may be collectively accounted for). The annual water use summary report shall be based on the volume of water used by Imperial Valley Solar and shall distinguish recorded daily use of potable and operation water. The report shall include the project's daily maximum, monthly range, and monthly average in gallons per day, and the annual use in acre-feet. After the first year and for subsequent years, this information shall also include the yearly range and yearly average potable and operation water used by the project.

SOIL&WATER-5 COC is unchanged.

Verification: The project owner shall submit a copy of the construction SWPPP to the CPM at least 10 days prior to site mobilization for review ~~and approval~~, and retain a copy of the approved SWPPP on site throughout construction. The project owner shall submit copies of all correspondence between the project owner and the SWRCB or the Colorado River RWQCB regarding the NPDES permit for the discharge of storm water associated with construction activity to the CPM within 10 days of its receipt or submittal. Copies of correspondence shall include the Notice of Intent sent to the SWRCB, the confirmation letter indicating receipt and acceptance of the Notice of Intent, any permit modifications or changes, and completion/permit Notice of Termination.

SOIL&WATER-7 The project owner shall prepare a detailed drainage maps for existing conditions showing the location of all watercourses on the site, including those not mapped in Soil and Water Figure 3 of this report, recognizing that site areas with visible evidence of past flows are subject to future flows. Maps prepared for the California Department of Fish and Game and U.S. Army Corps of Engineers may be submitted at the discretion of the CPM provided these maps are demonstrated to show all drainageways that may produce scour that could destabilize a SunCatcher foundation. The drainage map may be based on a geomorphic evaluation based on aerial photographs,

topographic maps, site visits, and other relevant factors, and may be supplemented by a two-dimensional flow analysis at the discretion of the project owner.

The project owner shall ensure and demonstrate through engineering calculations that all SunCatchers within flow areas as identified in the above-referenced drainage map are designed to withstand 100-year storm water scour ~~as estimated by a SunCatcher Foundation Depth and Stability Report to be completed by the project owner. The report shall include estimates of hydraulic conditions at each location where SunCatchers are to be located in flood hazard areas and relevant scour calculations for each location. Scour calculations shall be developed by a registered civil engineer competent in scour calculation and include all relevant scour components including pier scour, general scour, antidune trough depth, bend scour, and long-term degradation. An assessment shall be made whether foundation widths should be increased for debris production.~~

Remainder of COC is unchanged.

Verification: At least ~~90~~ thirty (30) days prior to the start of site mobilization, the project owner shall submit the final drainage map, scour calculations, ~~the Foundation Depth and Stability Report~~, and the Storm Water Damage Monitoring and Response Plan, with supporting analysis, to the CPM for review and approval. The project owner shall retain a copy of these documents onsite at the power plant at all times. The project owner shall prepare an annual summary of the number of SunCatchers failed, cause of the failure, and cleanup and mitigation performed for each failed SunCatcher.

SOIL&WATER-9 If water is to be used from the Dan Boyer Water Company, Tthe project owner shall provide the CPM two copies of the following: (1) Dan Boyer Water Company's use permit; (2) documentation and proof necessary to verify that all of Imperial County's specific terms for the well permit have been met; and (3) thean executed Water Purchase Agreement (agreement) or option between Imperial Valley Solar and the Dan Boyer Water Company for the long term supply of groundwater for the project. The agreement shall specify the agreed upon delivery rate to meet the Imperial Valley Solar project's maximum construction and operation requirements (maximum supply of 34 acre-feet per year).

No later than 30 days prior to use of If recycled water from the Seeley Waste Water Treatment Facility (WWTF) becomes an alternative water supply, the project owner shall provide the CPM two copies of the executed Recycled Water Purchase Agreement (agreement) with the recycled waste water purveyor for the long-term supply (40 years) of disinfected tertiary recycled water to the Imperial Valley Solar project. The project shall not use recycled

water operate without a long term agreement for recycled water delivery and connection to a recycled water pipeline for project use. The agreement shall specify a delivery rate to meet Imperial Valley Solar project's maximum operation requirements and all terms and costs for the delivery and use of recycled water at the Imperial Valley Solar project. The Imperial Valley Solar project shall not use recycled water connect to the new recycled water pipeline without the final agreement in place and submitted to the CPM. The project owner shall comply with the requirements of Title 22 and Title 17 of the California Code of Regulations and section 13523 of the California Water Code insofar as it applies to use of water by the Imperial Valley Solar project.

The project owner shall work with the Seeley Waste Water Treatment Facility (SWWTF) to obtain approval from the RWQCB Division of Water Rights for the diversion of flows from the New River to the Imperial Valley Solar project.

Before if recycled water from the SWWTF is used available as the project's water supply, the project owner shall do the following:

1. Submit to the CPM evidence that the SWWTF has obtained approval from the RWQCB Division of Water Rights for any diversion of flows from the New River to the Imperial Valley Solar project;
2. Submit to the CPM evidence that a final agreement has been made between the project owner and the SWWTF that specifies the delivery rate to meet Imperial Valley Solar project's maximum operation requirements and all terms and costs for the delivery and use of recycled water by the Imperial Valley Solar project
3. Submit to the CPM evidence that metering devices are operational on the water supply and distribution systems.
4. Maintain metering devices as part of the water supply and distribution systems to monitor and record, in gallons per day, the total volume(s) of water supplied to Imperial Valley Solar project from the SWWTF. Those metering devices shall be operational for the life of the project.
5. For the first year of operation, the project owner shall prepare an annual Water Use Summary, which will include the monthly average of daily water usage in gallons per day, and total water used by the project on a monthly and annual basis in acre-feet. For subsequent years, the annual Water Use Summary shall also include the annual water used by the project in prior years. The annual Water Use Summary shall be submitted to the CPM as part of the annual compliance report.

Verification: No later than 6030 days prior to use of water from the Dan Boyer Water Company well, construction the project owner shall submit two copies of the well permit,

including the necessary documentation and proof that the specific terms of the permit have been met, and the executed agreement or option for the supply of groundwater for the project. The agreement or option shall specify that the water purveyor can provide water at a maximum rate up to 250,000 gpd and a maximum of 34 acre feet per year to the Imperial Valley Solar project.

No later than 30 days prior to use of water from the SWWTF, the project owner shall submit the items referenced in paragraphs 1 through 3 above. During the life of the project, while water from the SWWTF is being used, the project owner shall comply with items referenced in paragraphs 4 and 5 above.

SOIL&WATER-10 COC is unchanged.

Verification: At least ~~90~~thirty (30) days prior to the start of site mobilization, the project owner shall submit decommissioning plans to the CPM for review and approval prior to site mobilization. The project owner shall amend these documents as necessary, with approval from the CPM, should the decommissioning scenario change in the future.

SOIL&WATER-11 Stricken in its entirety.

SOIL&WATER-112: If the project uses groundwater as a drinking water supply that is not from an established potable water provider, the project is subject to the requirement of Title 22, Article 3, Sections 64400.80 through 64445 for a non-transient, non-community water system (serving 25 people or more for more than six months) and the project owner shall obtain a permit from the County of Imperial to operate a non-transient, non-community water system.

Verification: If the project proposes to use groundwater that is not from an established potable water provider to meet project potable demands, ~~the~~ project owner shall ensure that the groundwater well owner has obtain a permit to operate a non-transient, non-community water system from the County of Imperial least ~~sixty (60)~~thirty (30) days prior to commencement of construction at the site. The project owner shall supply updates annually for all monitoring requirements and submittals to County of Imperial related to the permit, and proof of annual renewal of the operating permit.

REL-1 From the time of the Energy Commission’s adoption of this condition of certification to the start of commercial operation of the Imperial Valley Solar Project, or to the closure of the Maricopa Plant, whichever occurs earlier, the project owner shall obtain and provide to the CPM quarterly data sets of reliability and maintenance data from the Maricopa Plant, including the following:

- logs of equipment failure data and operational data for all major equipment, including power conversion units, drive mechanisms, and controls. These logs shall include major equipment and plant availability factors, and major equipment and plant forced outage rates, including their causes and durations.
- plant operating logs showing dates and times of dispatch, and power level of dispatch.

During the first two years of the commercial operation of Imperial Valley Solar Project, the project owner shall maintain quarterly data sets of reliability and maintenance data, including the information specified in paragraphs a) and b) above, for Imperial Valley Solar Project and make the information available to the CPM upon request.

Verification: On a quarterly basis, the project owner shall submit the Maricopa project data described in paragraphs a) and b) above, to the CPM, and shall make the Imperial Valley Solar Project data available to the CPM upon request.

TRANS-1, -2, -3, -4 Will be provided in Staff’s Reply Brief

VIS-1 As feasible, Tthe project owner shall treat all non-mirror surfaces of all project structures and buildings visible to the public such that a) their colors minimize visual intrusion and contrast by blending with the existing tan and brown color of the surrounding landscape; b) their colors and finishes do not create excessive glare; and c) their colors and finishes are consistent with local policies and ordinances. The transmission line conductors shall be non-specular and non-reflective, and the insulators shall be non-reflective and non-refractive. This measure shall include coloring of security fencing with vinyl or other non-reflective coating; or with slats or similar semi-opaque, non-reflective material, to blend to the greatest feasible extent with the background soil.

Remainder of COC and verification are unchanged

VIS-2 To the extent feasible and consistent with safety and security considerations, the project owner shall design and install all temporary and permanent exterior lighting so that:

- a) lighting does not cause excessive reflected glare;
- b) lighting does not illuminate the nighttime sky;
- c) mounting heights and locations of all lighting fixtures will not allow light to fall on the mirror surfaces of the SunCatchers in the stowed position,
- d) illumination of the project and its immediate vicinity is minimized as to times of use and extent, and;
- e) ~~lighting on the exhaust stacks shall be the minimum needed to satisfy safety and security concerns.~~

Permanent night lighting shall comply with all applicable standards, practices, and regulations including, and specifically, the following Illuminating Engineering Society documents: 1. RP-33-99 Lighting for Exterior Environments 2. DG-13-99 Outdoor Lighting 3. TM-10-00 Addressing Obtrusive Light (Urban Sky Glow and Light Trespass) in Conjunction with Roadway Lighting 4. TM-15-07 Luminaire Classification System for Outdoor Luminaires.

Verification: At least ~~3090~~ days prior to ordering any temporary exterior lighting, the project owner shall contact the CPM to show compliance of temporary lighting with all of the above requirements. At least 30 days prior to ordering any permanent exterior lighting, the project owner shall contact the CPM to show compliance of permanent lighting with all of the above requirements. This shall include, but not be limited to, final lighting plans, fixture and control schedules, fixture and control cut sheets and specifications, a photometric plan showing vertical and horizontal footcandles at all property lines to a height of 20 feet, and the proposed time clock schedule.

Remainder of verification is unchanged.

VIS-3 Stricken in its entirety

VIS-4 To reduce the visual dominance and glare effects of the SunCatchers to motorists on Highway I-8, the applicant shall employ a combination of measures as necessary, including set-backs of the nearest SunCatcher units to a distance of ~~360~~300 feet from the adjoining roadway or as necessary to avoid excessive glare and reduce visual height and dominance of SunCatchers, slatted fencing as

described under Condition of Certification VIS-6, and set-backs of SunCatcher units from project fencing.

Verification is unchanged

VIS-6 1. The project owner shall insure the minimum distance from any SunCatcher reflector assembly to the property line shall be no less than ~~360~~ 300 feet to the nearest public roadway to reduce the possibility of flash blindness.

Remainder of COC and verification are unchanged.

VIS-7 COC is unchanged.

Verification: ~~At least 90 days prior to start of construction,~~ 30 days prior to construction or a lesser number of days agreed to by the applicant and the CPM or CBO, the project owner shall present to BLM's Authorized Officer and the CPM a revised staging area site plan including a set-back from I-8 of at least ¼-mile. If BLM's Authorized Officer and the CPM determine that the plan requires revision, the project owner shall provide to BLM's Authorized Officer and the CPM a revised plan for review and approval by BLM's Authorized Officer and the CPM. The project owner shall not begin construction until receiving BLM Authorized Officer and CPM approval of the revised plan.

Recent of Verification is unchanged.

Worker Safety-7 should be replaced with the following **Worker Safety -7 and -8**, and existing **Worker Safety- 8** should be renumbered as **Worker Safety-9**.

WORKER SAFETY-7 The project owner shall either:

(1) Reach an agreement, either individually or in conjunction with a power generation industry association or group that negotiates on behalf of its members, with the Imperial County Fire Department (ICFD) regarding funding of its project-related share of capital and operating costs to build and operate new fire protection/emergency response infrastructure and provide appropriate equipment as mitigation of project-related impacts on fire protection/emergency response services within the jurisdiction.

or

(2) Shall fund its share of the ICFD capital costs in the amount of \$1,400,000 and provide an annual payment of \$667,000 to the ICFD for the support of new fire department staff, operations, and maintenance commencing with the start of

construction and continuing annually thereafter on the anniversary of the payment until the final date of power plant decommissioning.

or

(3) The Project Owner shall fund a Fire Needs Assessment and Risk Assessment conducted by an independent contractor who shall be selected and approved by the CEC Compliance Project Manager (CPM) and fulfill all mitigation identified in the independent fire needs assessment and a risk assessment. The Fire Needs Assessment would address emergency response and equipment/staffing/location needs while the Risk Assessment would be used to establish the risk (chances) of significant impacts occurring. In no event shall the Project Owner's cost responsibility under this option exceed that under option (2), above.

Should the applicant pursue option (3), above, the Fire Needs Assessment and Risk Assessment shall evaluate the following:

- (a) Potential for impacts on the ICFD and the project allocated costs of new and/or enhanced fire protection/emergency response services (which shall include services for inspections, permitting, fire response, hazardous materials spill/leak response, rescue, and emergency medical services) necessary to mitigate such impacts;
- (b) The risk of impact on the local population that could result from potential unmitigated impacts on local fire protection and emergency services (i.e. "drawdown" of emergency response resources);
- (c) The extent that the project's exemption from local taxes will impact local fire protection and emergency response services; and
- (d) Recommendation of an amount of funding that should be provided to mitigate any identified significant impacts on local fire protection and emergency response services.

Compliance Protocols for the Fire Needs Assessment and Risk Assessment shall be as follows:

- (a) The Fire Needs Assessment and Risk Assessment shall be conducted by an independent consultant(s) selected and approved by the CPM;
- (b) The Fire Needs Assessment and Risk Assessment shall be fully funded by the project owner. The independent consultant(s) preparing the Fire Needs Assessment and Risk Assessment shall work directly for the Energy Commission;

- (c) The project owner shall provide the protocols for conducting the independent fire needs assessment for review and comment by the ICFD and review and approval by the CPM prior to the independent consultant's commencement of the fire needs assessment;
- (d) The CPM shall be copied in any correspondence including emails or letters and included in any conversations between the project owner and consultant; and
- (e) The CPM shall verify that the Fire Needs Assessment and Risk Assessment are prepared consistent with the approved fire needs assessment protocols and a risk assessment protocols.

No construction of permanent above ground structures shall occur until full funding of mitigation occurs either (i) pursuant to an agreement reached between the project owner (or a power generation industry association or group that includes the project owner) and the ICFD, or (ii) after payment of the fees described above for capital improvements and the first annual payment, or (iii) pursuant to the independent Fire Needs and Risk Assessments conducted by an independent consultant approved by the CPM.

Verification: At least thirty (30) days prior to the start of site mobilization, the project owner shall provide to the CPM:

(1) A copy of the individual agreement with the ICFD or, if the owner joins a power generation industry association, a copy of the group's bylaws and a copy of the group's agreement with the ICFD; and evidence in each January Monthly Compliance Report that the project owner is in full compliance with the terms of such bylaws and/or agreement.

or

(2) Documentation that the amount of \$1,400,000 has been paid to the ICFD, documentation that the first annual payment of \$667,000 has been made, and shall also provide evidence in each January Monthly Compliance Report during construction and the Annual Compliance Report during operation that subsequent annual payments have been made.

or

(3) A protocol, scope and schedule of work for the independent Fire Needs Assessment and Risk Assessment and the qualifications of proposed contractor(s) for review and approval by the CPM; a copy of the completed Fire Needs Assessment and Risk Assessment showing the precise amount the project owner shall pay for mitigation; and documentation that the amount has been paid.

Annually thereafter, the owner shall provide the CPM with verification of funding to the Imperial County Fire Department for required fire protection services mitigation pursuant to the agreement with the Fire Department or the CPM approved independent fire needs assessment.

WORKER SAFETY -8 The project owner shall:

Provide a \$2,067,000 payment to Imperial County Fire Department prior to the start of construction. This funding shall off-set any initial funding required by **WORKER SAFETY-7** above until the funds are exhausted. This offset will be based on a full accounting by the Imperial County Fire Department regarding the use of these funds.

Verification: At least 30 days prior to the start of site mobilization the project owner shall provide documentation of the payment described above to the CEC CPM. The CEC CPM shall adjust the payments initially required by **WORKER SAFETY-7** based upon the accounting provided by the Imperial County Fire Department.

GEN-2 COC is unchanged.

Verification: At least 60 days (or a project owner and CBO approved alternative time frame) prior to the start of rough grading 30 days prior to construction or a lesser number of days agreed to by the applicant and the CPM or CBO, the project owner shall submit to the CBO and to the CPM the schedule, the master drawing and master specifications lists of documents to be submitted to the CBO for review and approval. These documents shall be the pertinent design documents for the major structures and equipment listed in **Facility Design Table 2**, below. Major structures and equipment shall be added to or deleted from the table only with CPM approval. The project owner shall provide schedule updates in the monthly compliance report.



BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT
COMMISSION OF THE STATE OF CALIFORNIA
1516 NINTH STREET, SACRAMENTO, CA 95814
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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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DECLARATION OF SERVICE

I, Chester Hong, declare that on August 11, 2010, I served and filed copies of the attached "**Staff's Imperial Opening Brief**", dated August 11, 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:

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

by personal delivery;

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:

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