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STATE OF CALIFORNIA

Energy Resources
Conservation and Development Commission

In the Matter of: Petition For Amendment for the **PALEN SOLAR ELECTRIC GENERATING SYSTEM**	**DOCKET NO. 09-AFC-7C** **PALEN SOLAR HOLDINGS, LLC'S OPENING BRIEF**

In accordance with the Committee direction at the PreHearing Conference held on October 24, 2013 and the Committee Order dated November 1, 2013, Palen Solar Holdings LLC (PSH) files this Opening Brief to address disputed topics and the questions posed by the Committee. Specifically, this Opening Brief addresses the following questions requested by the Committee. Short answers are provided here, with support for these answers provided in later sections of this brief

Question 1: Regarding the Federal Migratory Bird Act, the Bald and Golden Eagle Protection Act, and the Fully Protected Species Act, please brief whether incidental take permits are available, necessary, and at what point permits would be required for a project's take of species covered under the above-mentioned laws.

Response 1: The Federal Migratory Bird Act (MTBA) neither requires nor provides any incidental take permit and, for the reasons discussed below, the MBTA does not restrict the Commission from authorizing construction and operation of the PSEGS.

The Bald and Golden Eagle Protection Act (BGEPA) authorizes the USFWS to permit the take of bald and golden eagles pursuant to an application. USFWS has provided guidelines for wind projects to voluntarily prepare and

implement an Eagle Conservation Plan (ECP) which would allow the USFWS to assess the risk of take of bald and golden eagles and issue a permit prior to a take, but such prior authorization is not mandatory and the BGEPA does not restrict the Commission from authorizing the construction and operation of the PSEGS.

Regarding species protected by California Fish and Game Code 3511, while there is no evidence showing that a take is likely to occur, in the unlikely event a take occurs in the future, PSH can apply for take authorization under California Fish and Game Code Section 2835. Since there is no evidence that take of a "fully protected species" is likely and will occur, the California Fish and Game Code does not restrict the Commission from authorizing the construction and operation of the PSEGS.

Question 2: Based on evidence in the record, what should the Committee conclude about the likely or potential magnitude of the impact of this project on avian mortality? What metrics should the Committee consider applying to weigh this impact as called for in Public Resources Code §§ 21081 and 25525?

Response 2: The Commission would be engaging in speculation that is specifically prohibited by the California Environmental Quality Act (CEQA) if it attempted to predict and quantify potential avian mortality. The Commission should consider that the Conditions of Certification are employing multiple mitigation measures that will reduce and minimize impacts to the extent feasible when it considers whether to make a Finding of Override pursuant to Public Resources Code (PRC) Section 21081. As described in more detail in this brief, the Commission need not make a Finding of Override pursuant to PRC Section 25525, because the project will comply with all avian-related laws, ordinances, regulations and standards (LORS).

Question 3: Should the Energy Commission require the project to take additional steps to avoid avian mortality, including possible curtailment, if project operations were to result in excessive

avian mortality? If so, what metric should be used to establish a maximum limit that would trigger a curtailment recommendation?

Response 3: The Commission should find that it is already requiring PSH to take extraordinary steps to avoid and minimize impacts to avian species with the Conditions of Certification. Any metric that the Commission would impose to trigger any remedial action should be developed in the Bird and Bat Conservation Strategy (BBCS). The BBCS contemplates numerous actions ranging from changes in monitoring to implementation of various bird hazing techniques to feasible changes in operations. Such measures can only be developed and implemented based on the monitoring after the PSEGS is constructed and operational and tailored to the specific types of avian impacts. Any condition that would trigger curtailment would not only undermine the TAC but would be fatal to project financing, rendering the mitigation infeasible under CEQA.

Question 4: Regarding the Technical Advisory Committee (TAC), what modifications to Condition of Certification **BIO-16b** would best facilitate public transparency?

Response 4: PSH supports requiring the recommendations of the TAC be posted to the Commission website so that input from the public can be solicited prior to the Compliance Project Manager (CPM) taking action on the recommendation.

Question 5: If the Riverside County LORS are preempted by federal law in **Land Use**, why are they not preempted in **Visual Resources**?

Response 5: Riverside County LORS are also preempted in Visual Resources. Staff corrected its references for consistency and to make it clear that the PSEGS complies with all applicable Visual Resources-related LORS.

In addition to these issues, PSH includes in this Opening Brief a discussion of all disputed topics with Staff which include:

1. **Cultural Resources** – The Commission should reject Staff's analysis of Cultural Impacts due to visibility of the PSEGS and the imposition of Conditions of Certification **CUL-1** and **CUL-17**. The Commission should retain Condition of Certification **CUL-16** which acknowledges federal preemption on land managed by the Bureau of Land Management (BLM). Lastly, the Commission should accept PSH's minor modifications to Conditions of Certification to clarify that construction can commence and continue simultaneously with data recovery efforts as long as the construction activities avoid disturbance of the area where data recovery has not yet been completed.

2. **Biological Resources** – The Commission should adopt PSH expert's recommendation of 178 acres of indirect impacts to Mojave Fringe Toed Lizard habitat due to the sand transport corridor modeled effects.

3. **Geology/Paleontology** – The Commission should reject Staff's analysis of impacts and imposition of Condition of Certification **PAL-9**.

4. **Worker Safety and Fire Protection** – The Commission should reject Staff's analysis and imposition of monetary compensation to the Riverside County Fire Department (RCFD) pursuant to Condition of Certification **WORKER SAFETY-6** and instead adopt PSH's expert's recommendations**.**

Disputes with the Interveners will be addressed in PSH's Rebuttal Brief after review of the issues the Interveners raise in their Opening Briefs.

RESPONSE TO COMMITTEE QUESTIONS

1. COMPLIANCE WITH FEDERAL AND STATE LAWS TO PROTECT AVIAN SPECIES

This section discusses project compliance with: (1) the federal MBTA and related state avian protection statutes, including California Fish and Game Code Section 3503.5, which prohibits take of raptors, and Fish and Game Code Section 3513, which prohibits take of migratory birds protected under the federal MBTA; (2) Section 3511 of the California Fish and Game Code, which identifies birds that are considered to be "fully protected" under state law; and (3) the federal BGEPA.

Certain parties may argue that, because these statutes prohibit specified types of avian take, and that the risk of take (no matter how remote) can never be completely discounted, the project cannot comply with state and federal LORS relating to avian species. It is clear from the evidence that avian mortality and injury could possibly occur due to the generation of solar flux. It is also equally clear from the evidence that any such avian mortality and injury cannot be predicted with certainty, including to any species protected under any of the above mentioned laws. In addition, and most importantly, PSH proposed, and Staff modified and accepted, a complete suite of enhancement, mitigation and adaptive management measures designed to reduce and minimize injury and mortality from solar flux and collisions. At the evidentiary hearing, Staff explained the program, which is embodied in Conditions of Certification **BIO-16a** and **BIO-16b**. These conditions represent an unprecedented project owner commitment to reduction in avian mortality and injury. The program contains two main components. The first is the funding of $1.8 Million to be directed towards bird conservation and enhancement measures. The second main component is the development and implementation of a BBCS. The BBCS is the tool that will ensure adequate pre- and post-construction monitoring, and will implement risk reduction and adaptive management measures specifically tailored to the data collected during the monitoring. The BBCS employs a TAC comprised of representatives of the project owner (with no voting rights) and one member each of the BLM, United States Fish and Wildlife (USFWS), California Department of Fish and Wildlife (CDFW) and the Commission. The role of the TAC will be to gather, review data and make recommendations to the CPM on the content and implementation of the BBCS. It is important for the Commission to consider in its deliberations of whether the PSEGS will comply with avian related LORS, the comprehensive program comprised by Conditions of Certification **BIO-16a** and **BIO-16B**. Simply concluding that there is mortality and injury risk to special status species without taking into account the risk reduction effects of these conditions, as some parties have urged, discounts the hard work between PSH and Staff to develop these conditions. Any analysis of compliance with avian-related LORS must be conducted with the acknowledgment of the fact that the implementation of Conditions of Certification **BIO-16a** and **BIO-16b** will reduce risks to avian species.

As discussed more fully below, historically none of the avian-related LORS have been proactively interpreted or applied to address a hypothetical "potential risk" to "one bird." If any possible risk of avian take were to generate a LORS compliance issue, virtually all human activities, and electrical generation facilities and their transmission lines would necessarily be illegal. State and federal avian protection laws, many of which were enacted decades ago to address completely unrelated concerns (e.g., mass hunting of migratory species), have never been interpreted by the CEC or other responsible agencies in this manner.

A. Conformance with the MBTA, Fish and Game Code Section 3503.5, and Fish and Game Code Section 3513.

Certain parties may contend that any take of migratory birds or raptors under the MBTA, Fish and Game Code Section 3503.5 or Fish and Game Code Section 3513, is illegal. By extension, they may claim that since the MBTA, Sections 3503.5 and 3513 do not provide specific take authorization, any take of a species protected would be a violation of LORS since a "take permit" was not obtained. First, the Commission should acknowledge that such an interpretation would render it impossible for any energy project to comply with these LORS.

As discussed in the Hidden Hills proceeding, recent studies have shown, for example, that avian mortality per gigawatt hour in the United States is approximately 0.27 for wind projects, 0.6 for nuclear facilities, and 9.4 birds for conventional gas or other fossil fuel electric generation plants. During 2009, these mortality rates translate to approximately 46,000 bird deaths from wind turbines, 460,000 deaths from nuclear plants, and 24 million deaths from fossil fuel facilities.[1] Annual avian mortality has also been estimated to range from 100,000 to 1 billion from building collisions, up to 175 million from power line collisions and electrocutions, and from 365 million to 1 billion due to household and feral cat predation.[2] Despite this level of avian mortality, renewable, nuclear and fossil fuel power generation facilities, tall buildings, power lines, power poles, and feline ownership continues to be permitted throughout the country and in California.

The MBTA and similar state avian protection statutes were generally enacted to address irresponsible hunting and trapping activity typified by the extinction of once-ubiquitous species, such as the passenger pigeon, in the late 19th and early 20th centuries.[3] Regulatory agencies, legislators and the courts have long recognized that the subsequent extension of these laws to non-hunting activity risks criminalizing common, everyday human activities in an unreasonable manner. Many federal courts, in fact, have found that MBTA liability does not extend beyond hunting or trapping to otherwise lawful, commercially valuable activities (*see, e.g., United States v. Brigham Oil & Gas, L.P.,* No. 4:11-po-005-DLH et al., 2012 U.S. Dist. LEXIS 5774 (D.N.D. Jan. 17, 2012; see also *Newton County Wildlife Association v. United States Forest Service* (8th Cir. 1997) 113 F.3d 110, 115) (MBTA only applies to physical conduct of the sort engaged in by hunters and poachers).

[1] Benjamin K. Sovacool (2012), "The avian and wildlife costs of fossil fuels and nuclear power," Journal of Integrative Environmental Sciences, 9:4, 255-278.
[2] Meera Subramanian (2012), "An Ill Wind," Nature, 484, 310-311.
[3] See, e.g., http://www.fws.gov/migratorybirds/RegulationsPolicies/treatlaw.html (accessed March 27, 2013).

Other courts have found that, on facts specific to each case, the MBTA can apply to activities that do not intend to harm avian species, such as an otherwise illegal failure to cover waste oil tanks that the operator knew were killing migratory birds (*see, e.g., United States v. Citgo Petroleum Corporation, et al.,* No. 2:06-cr-00563 memorandum opinion (S.D. Tex. Sept. 5, 2012); *see also United States v. Moon Lake Electrical Ass'n* (D. Colo. 1999) 45 F.Supp. 2d 1070)(unreasonable refusal to install inexpensive avian protection measures for known hazards subject to MBTA enforcement). Even in these cases, however, several courts have further noted that the MBTA cannot be construed in a manner that would criminalize any form of migratory bird take. In *United States v. Citgo Petroleum*, the court dismissed claims that tried to extend the statute beyond hunting by asserting that, "Certainly construction that would bring every killing within the statute, such as deaths caused by automobiles, airplanes, plate glass modern office buildings or picture windows in residential dwellings into which birds fly, would offend reason and common sense" (*quoting United States v. FMC Corp*., 572 F.2d 902, 908 (2d Cir. 1978)).

The USFWS, which has sole jurisdiction to enforce the MBTA, has articulated a policy of "selective enforcement" to avoid construing the MBTA in a potentially limitless (and constitutionally suspect) manner. In 2000, the Department of the Interior stated that the USFWS has "used enforcement and prosecutorial discretion in the past regarding individual to provide assurance that communications tower operators implementing reasonable avian mortality avoidance measures would not be subject to MBTA criminal sanctions."[4] In 2010, USFWS Region 8, which includes California, published solar energy guidelines stating that although MBTA liability could not be completely "absolved," the "USFWS Office of Law Enforcement focuses its resources on investigating and prosecuting individuals and companies that take migratory birds without identifying and implementing all reasonable, prudent and effective measures to avoid that take."[5] Consequently, the USFWS has specifically indicated that MBTA enforcement will focus on instances where migratory bird impacts are not avoided by implementing available, reasonable measures or result from bad faith.

Recent state and federal renewable energy cases indicate that state avian protection laws are subject to similar implementation flexibility. In response to a claim that a permit could not be issued for a wind project that available evidence demonstrated would, in fact, result in raptor take under Fish and Game Code Section 3503.5, a federal court found that the "assertion that California Fish & Game Code prohibits the killing of any raptors is not factually or legally supported." *Desert Protective Council v. U.S. Dept. of the Interior*, 2013 WL 755913 (S.D. Cal. Feb. 27, 2013)). A state court has held that, notwithstanding the

[4] Jamie Rappaport Clark, Service Guidance on the Siting, Construction, Operation and Decommissioning of Communications Towers, Memorandum to Regional Directors, U.S. Department of the Interior (September 14, 2000).
[5] USFWS, Region 8 Interim Guidelines For The Development Of A Project-Specific Avian And Bat Protection Plan For Solar Energy Plants And Related Transmission Facilities, September 2010.

Fish and Game Code's raptor and other avian take prohibitions, wind projects that are known to kill raptors and migratory birds could continue to operate because the applicable public agencies had "attempted to strike a balance between the generation of clean renewable energy with wind turbines and the protection of raptors and other birds adversely affected by the turbines." *Center for Biological Diversity, Inc. v. FPL Group, Inc.* (2008) 166 Cal.App.4th 1349, 1370. These cases demonstrate that state avian protection statutes have been, and continue to be, interpreted to allow for take under circumstances where such impacts are unavoidable, incidental effects of other lawful activities, such as the development of renewable energy.

As discussed above, Conditions of Certification **BIO-16a** and **BIO-16b** provide "reasonable, prudent and effective measures" for avoiding take of protected species. In addition, to Conditions of Certification **BIO-16a** and **BIO-16b,** the project will implement all applicable nest avoidance measures (**BIO-8**) and power line "bird-safe" and electrocution avoidance measures to avoid collision and electrocution impacts to raptors (**BIO-8**). Out of an abundance of caution, Staff has identified that there is a risk of collision and interaction with solar flux by protected species, but the project's adaptive management program will identify and implement all reasonable, prudent and effective measures to avoid raptor or migratory bird take ***should such impacts occur***. Notwithstanding whether or not a single raptor is injured, Conditions of Certification **BIO-16a** and **BIO-16b** will provide $300,000 for power pole retrofitting or other raptor enhancement measures. Additionally, $1.5 Million will be directed by the Commission, with input from the state and federal wildlife agencies, toward other conservation and mitigation measures which will be implemented ***irrespective of actual take for the benefit of raptors and other birds***. This approach is consistent and will conform with the USFWS selective enforcement policy for the MBTA, and related state avian protection statutes.

B. Conformance with Fish and Game Code Section 3511.

California has never enacted a "fully protected species act." Certain provisions of the Fish and Game Code adopted prior to the existing version of major species protection laws, such as the California Endangered Species Act (CESA), have been construed to prohibit take of certain species (e.g., to "fully protect" the identified species).

Fish and Game Code Section 3511 was enacted in the 1960s to address avian overhunting and related problems, and prohibits the take of approximately 13 birds. Unlike federal endangered species laws, the California definition of "take," including under Section 3511, refers solely to causing death or injury and does not extend to habitat modification even where such habitat modification could harm an individual bird.[6] Certain of the species identified in Section 3511, such as the brown pelican and peregrine falcon,

[6] *1995 Cal. AG LEXIS 40; 78 Op. Atty Gen. Cal. 137* (May 15, 1995).

were once considered threatened or endangered, but were subsequently de-listed by state or federal wildlife agencies as populations recovered. In some cases, Section 3511 provides common or unthreatened birds with greater protection than avian species that are listed as threatened or endangered under state and federal endangered species laws. In part to address this paradox, in 2011 the California legislature for the first time enacted an incidental take mechanism for "fully protected" species in the context of an approved Natural Communities Conservation Plan (NCCP) (*see* Fish and Game Code Section 2835).

The golden eagle is the only "fully protected" avian species that is known to occur at or near the project site. Exhibit 2000, pages 4.2-65 through 4.2-66 cites to 2010 golden eagles nest surveys conducted and approved for the Approved Project; Exhibit 1014 (results of 2012-2013 winter baiting surveys); Exhibit 1035 (results of 2013 spring nest surveys); and Exhibit 1037 (Spring 2013 avian survey results). Through thousands of hours of surveys, the record demonstrates that Golden Eagle use of the site, if at all, is extremely low. Exhibit 1014 describes that during surveys, which included baiting stations, only one golden eagle was ever observed at a location approximately 5 miles northeast of the site in the Palen Mountains, where it was attracted to a baiting station specifically set up to attract eagles for a period of five weeks. With respect to nest surveys, only three nests considered to be ***potentially*** active were discovered through intensive helicopter and ground surveys. All of these potentially active nests were located south of I-10 and more than 7 miles south of the project site in the Chuckwalla Mountains. A single observation of a Golden Eagle attracted to a winter baiting station and the discovery of three potentially active nests within a 10 mile radius demonstrates extremely low golden eagle use of the surrounding area. The evidence in the record supports the following conclusions:

- Golden eagle use of the project site and the surrounding region is very low, even with the presence of artificial perching sites on existing power poles. The nearest potentially occupied golden eagle nests are located several miles south of the proposed facility.
- Towers and other larger structures will be perch- and nest-proofed and will not encourage eagle use of the airspace near the facility or in areas adjacent to the upper portions of the towers where higher solar flux levels could occur.
- All project power lines and power poles will be constructed and maintained in a "raptor-safe manner in accordance with APLIC (1994, 2006) guidelines, which will eliminate electrocution risks and avoid transmission facility collisions.

In contrast, there is no credible, substantial evidence in the record suggesting that any harm to a golden eagle is likely to occur. Certain parties have speculated that eagles may

enter areas of higher flux or collide with project facilities at some point in time over the project's lifetime, but have provided no evidence that any such impact could occur or is even reasonably likely to occur. Speculation, unsubstantiated opinion or similar narratives do not constitute take within the meaning of Section 3511 or any other avian protection statute. If the mere possibility of a take under a remote or unlikely scenario could be construed as an actual take, virtually all power generation and similar larger scale, public and utility facilities in California would be unable to comply with Section 3511 or other avian protection laws.

The project will conform with Section 3511 by avoiding golden eagle take. In the unlikely event that a golden eagle impact occurs notwithstanding the implementation of several measures designed to avoid or minimize this remote risk, the project can apply for incidental take coverage under state law pursuant to Fish and Game Code Section 2835. Finally, as with the MBTA, the California Department of Fish and Wildlife has authority to take action should it determine that unlawful conduct caused a prohibited golden eagle take.

The Commission is specifically authorized to rely on CDFW's enforcement discretion, which is currently exercised by CDFW all over California for a variety of facilities that take "fully protected species" daily. This conclusion is supported by the Third Appellate Court of California, in Clover Valley Foundation v. City of Rocklin[7], where the Court found it permissible for an agency to rely on CDFW's enforcement of its statutes, even where no such permit for take exists.

C. Conformance with BGEPA.

BGEPA was originally enacted in 1940 and was extended to cover golden eagles in 1962. The Act did not include an incidental take provision applicable to renewable energy or similar utility-related activities until 2009, when the bald eagle was delisted from the federal Endangered Species Act (ESA) coverage. The delisting focused attention on BGEPA, rather than ESA, as the primary federal mechanism for protecting eagles. Wind energy operators became concerned that strict adherence to BGEPA could preclude wind development since wind turbines have been documented to kill golden eagles. In response to this concern, the USFWS adopted a "programmatic" permit for incidental eagle take from wind or other utility projects (*see* 50 CFR Section 22.26). The USFWS also issued a series of wind industry guidelines, including guidelines for the preparation of a voluntary "eagle conservation plan" (ECP). As developed by the USFWS, an ECP is an analytical tool designed to evaluate the need and establish the basis for a wind energy eagle take permit. The ECP guidelines have been finalized for wind projects, but no guidance has ever been proposed for using ECPs in other, non-wind energy contexts.

[7] 197 Cal. App. 4th 200; 128 Cal. Rptr. 3d 733; 2011 Cal July 8, 2011.

The project will conform with BGEPA by avoiding eagle take. As discussed above, there are several reasons why the risk of any such take is remote, and contentions to the contrary are based solely on speculative, unsubstantiated opinion. There is no substantial evidence suggesting that the project will likely result in, or is even reasonably likely to result in, an eagle take. Consequently, there is no basis for asserting that the project may require BGEPA incidental take coverage or that the project would be in violation of a LORS on the basis of BGEPA.

BGEPA, like the ESA, allows USFWS to issue a permit authorizing incidental take of an eagle. The first step is preparation of an ECP, which as described above, is a voluntary federal process that includes a detailed take estimation protocol that is currently only applicable to wind projects and multi-turbine wind energy installations. The ECP estimation protocol uses formulas that are derived from documented evidence of wind turbine eagle and other avian impacts. Currently none of this information and estimation methodology is applicable to any other renewable energy technology, including the PSEGS. Condition of Certification **BIO-16b** includes a requirement for PSH to prepare an Eagle Protection Plan (EPP) prior to commercial operation. The EPP would contain most, if not all, of the information necessary for an ECP. PSH has also committed to USFWS and BLM to prepare an ECP prior to commercial operation. At this time, PSH believes that the risk analysis portion of the ECP would predict such a low risk of eagle take that USFWS may not issue an incidental take permit. However, whether or not PSH obtains incidental take authorization under BGEPA, in the unlikely event that an eagle was injured or killed due to operation of the PSEGS, PSH could thereafter obtain such authorization in the same manner that wind generating facilities have done for taken eagles prior to receipt of a permit under BGEPA.

2. IMPACTS TO AVIAN SPECIES AND APPLICATION OF PUBLIC RESOURCE CODE FINDINGS OF OVERRIDE PROVISIONS

The Committee has requested a metric for avian impacts that it could use in balancing whether to make a finding of override under PRC Section 21081 (CEQA) and/or PRC Section 25525. First, the Committee should note that Staff and PSH agree that the PSEGS will comply with all avian related LORS, Exhibit 2000, page 1-5. Specifically with respect to take of “fully protected” species, Staff states that the probability of risk of take is uncertain and cannot be quantified Exhibit 2000, page 4.2-6. Therefore, the Committee need not consider making a finding of override under PRC Section 25525 for avian-related LORS issues. However, the Committee does need to consider making a finding of override consistent with PRC Section 21081 for potentially significant avian-related CEQA impacts that may be occur even with the implementation of the feasible mitigation measures identified in the Conditions of Certification.

Additionally, the Committee should understand that in order to work cooperatively with Staff in developing enhancement, mitigation, monitoring and an adaptive management framework, PSH has “agreed to disagree” with Staff’s significance threshold for avian impacts under CEQA. This cooperation should not be misconstrued as concurrence in the potential magnitude of impacts that may be implied from Staff’s analysis or modeling. To be clear, PSH supports a cautionary finding that even with the Conditions of Certification, there may be the potential for unmitigatable residual avian CEQA impacts. The following is provided to refute any argument that this approach is not extremely conservative or that specific predictions of avian mortality are required in order for the Commission to approve the PSEGS amendment.

Exhibit 2000, page 4.2-13 cites to Appendix G of the CEQA Guidelines for avian impact significance criteria. The portions of the CEQA Guidelines that are relevant for assessing potential avian impacts include an analysis of whether a project will (1) “have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service;” or (2) “[i]nterfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.” 14 Cal. Code Regs. § 15000 *et seq,* Appendix G, IV (a) and (c) (2010).

Under these Guidelines, a CEQA lead agency must evaluate whether a potential impact to any candidate, sensitive or special status bird, or any native resident or migratory bird, from any project-related cause, would result in a “significant adverse effect.” The CEQA Guidelines define a "significant adverse effect" as “a substantial, or potentially substantial, adverse change” to avian species. 14 Cal. Code Regs. § 15382. This determination must be based on substantial evidence, which includes “facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts.” The CEQA Guidelines specifically state that a significance finding cannot be supported by “[a]rgument, speculation, unsubstantiated opinion or narrative [or] evidence which is clearly erroneous or inaccurate….” 14 Cal. Code Regs. § 15384. The purpose of the analysis is to "provide public agencies and the public in general with detailed information about the effect which a proposed project *is likely* to have on the environment." Pub. Res. Code § 21061 (emphasis added).

To assess the impact of a proposed project on the environment, a CEQA lead agency must examine the changes to existing environmental conditions that would occur in an affected area if a proposed project was implemented. 14 Cal. Code Regs. § 15126.2(a); *San Joaquin Raptor Rescue Ctr. v. County of Merced* (2007) 149 Cal.App.4th 645, 676.

When no accepted methodology exists to assess an environmental impact, the lead agency should conclude that the impact is too speculative to reliably evaluate and is therefore unknown. Analytical uncertainty does not mean and cannot support a finding that an impact is significant. *See, e.g., Laurel Heights Improvement Ass'n v. Regents of Univ. of Cal.* (1993) 6 Cal.4th 1112, 1137. When the assessment of a project's effects would be speculative and require an analysis of hypothetical conditions, the effect need not and should not be evaluated. *Anderson First Coalition v. City of Anderson* (2005) 130 Cal.App.4th 1173, 1182; *Marin Mun. Water Dist. v. KG Land Cal. Corp.* (1991) 235 Cal.App.3d 1652, 1662. CEQA does not authorize lead agencies to impose a "precautionary principle" against an applicant, whereby the agency assumes a potential impact is significant unless the applicant proves it is not. The only party who would have standing to object to applying the "precautionary principle" to the applicant would be PSH. In this case. PSH is not objecting to the finding of potentially significant avian impacts in order to work cooperatively with the agencies. However, PSH is objecting to any attempt to quantify the magnitude of such impacts since any quantification would clearly be speculative.

Consistent with these fundamental CEQA requirements, all prior CEC solar project approvals[8] correctly determined that potential avian impacts associated with new solar renewable energy technology could not be identified with certainty. In lieu of impermissible speculation and conjecture, the Commission addressed potential, but uncertain and unquantifiable, avian impacts through comprehensive monitoring and adaptive management conditions that would identify and reduce such impacts to less than significant levels. This approach was taken on the Approved Project.

For purposes of analyzing the Modified Project, the environmental baseline is the Approved Project.[9] That is, the Commission should focus its analysis on any increase in impacts above those identified for the Approved Project. Staff has identified that the solar flux inherent in the operation of the Modified Project has the potential to cause impacts different than those posed by the Approved Project. As discussed above, Conditions of Certification **BIO-16a** and **BIO-16b** not only include robust monitoring and adaptive management commitments, but also require implementation of significant additional avian conservation and enhancement measures irrespective of whether avian impacts are actually documented during construction and operation of the PSEGS. The measures include substantial avian habitat conservation, power pole retrofitting to avoid or minimize avian impacts (primarily raptor electrocutions), and migratory bird conservation measures.

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[8] *See, e.g.,* the Abengoa Mojave Solar Project (2010), Beacon Solar Energy Project (2009), Blythe Solar Power Project (2010), and original Approved Palen Solar Power Project (2010) (solar trough technology); the Calico Solar Project (2010) and Imperial Valley Solar Project (2010)(stirling engine solar technology); and the Rice Solar Energy Project (2010) and Ivanpah Solar Energy Project (2010)(concentrating solar tower technology).

[9] Public Resources Code Section 21166, CEQA Guidelines 15162 and 15163. See also *Black Property Owners Association v. City of Berkeley* 22 Cal. App. 4th 974; *Benton v. Board of Supervisors* 226 Cal. App. 1467.

These measures are consistent with the avian impact avoidance, minimization and mitigation approaches that have been included in the proposed Desert Renewable Energy Conservation Plan (DRECP), and represent the most extensive avian-related conservation commitments ever proposed by a solar project.

While PSH does not agree with all of the assumptions used for CEC Staff's model, we recognize the good faith effort to predict impacts. But even with the model, it is impossible to predict the numbers of avian and bird mortality. Any such prediction would be speculative in violation of CEQA principles.

Therefore, we believe it is not required and it is infeasible to quantify potential avian impacts for the Committee. Specific facts upon which the Committee should make the findings of override required by PRC 21081 (but not required for PRC 25525) are provided in Exhibit 1077, Project Description and Overriding Consideration Opening Testimony and are discussed more fully later in this Opening Brief.

3. ADDITIONAL STEPS TO AVOID AVIAN MORTALITY

The Committee requested that this brief address whether a metric could be applied that would warrant curtailment of operations. The Committee should recognize the incredible effort that PSH and Staff have made to develop the comprehensive suite contained in Conditions of Certification **BIO-16a** and **BIO-16b.** This comprehensive program allows the project to go forward with implementation of robust monitoring and then development and implementation of adaptive management and risk reduction measures that will be specifically tailored to the information gathered during monitoring. PSH presented feasible adaptive management techniques in Exhibit 1077, Biological Resources Opening Testimony. PSH's cooperation should not, however, be misconstrued as acknowledgement that mortality and injury will rise to significant levels.

As discussed above, it would be mere speculation to determine a level of impact that could trigger curtailment. Additionally, any attempt to require curtailment would render the PSEGS unfinanceable (and likely put PSEGS into default under its existing power purchase agreements). Such an approach would essentially be voting to deny the amendment petition, which is the very definition of infeasible. CEQA does not allow imposition of infeasible mitigation. Additionally, such an approach is simply not necessary; with implementation of the adaptive management program, the PSEGS will be taking feasible measures to reduce risks.

4. **ROLE AND TRANSPARENCY OF TECHNICAL ADVISORY COMMITTEE**

The Committee requested a discussion of how to provide transparency of the TAC contained in Condition of Certification **BIO-16b.** In an earlier version of Condition of Certification **BIO-16b**, Staff proposed having the TAC conduct public workshops or hearings. PSH rejects this approach and filed testimony outlining its objections. At the evidentiary hearing, after reading PSH's Rebuttal Testimony, Staff agreed to remove the public workshop approach from Condition of Certification **BIO-16b**. Staff explained under cross-examination from Intervener CBD, that it would make the recommendations of the TAC to the CPM publicly available on the CEC website.[10] PSH supports such an approach and proposes the following additional language to be incorporated into the Verification of Condition of Certification **BIO-16b**.

> **The CPM shall post recommendations from the TAC to the CEC website for a minimum of 15 days prior to making a decision on the TAC recommendation. In the event the CPM must make a quick decision (e.g., to alleviate an emergency situation), the CPM need not post the TAC recommendation for a minimum of 15 days.**

5. **VISUAL LORS PREEMPTION**

The Committee has requested clarification relating to the need for a finding of override for noncompliance with Visual Resources LORS. The Committee may be reading from the Exhibit 2000, Final Staff Assessment, Part A, introductory table which mistakenly included a reference to Visual Resources LORS noncompliance. This was corrected by Staff in Exhibit 2002 where Staff makes clear that the PSEGS will comply with Visual Resources LORS.

DISPUTES WITH STAFF

1. **CULTURAL RESOURCES**

A. The Modified Project Does Not Result in Significant Cultural Impacts to Staff's Newly Identified PRGTL.

PSH disagrees with Staff's conclusion regarding the significance of impacts on its newly created Pacific Rio Grande Trail Landscape (PRGTL). The Commission should retain the version of Condition of Certification **CUL-1** contained in the Final Decision in lieu of adopting Staff's new PRGTL, Staff's analysis of impacts, and Staff's overly burdensome

[10] 10/29/13 RT pages 174 through 175, testimony of Eric Knight

and unfinanceable new Condition of Certification **CUL-1.** As described in more detail below, the Commission should legally base its rejection on the following:

- There is no new evidence that was unavailable to Staff at the time of the licensing proceeding for the Approved Project that warrants expansion of Staff's original cultural landscape, the Prehistoric Trails Network Cultural Landscape (PTNCL) to its new PRGTL.
- Staff has failed to take into account that the environmental baseline includes the Approved Project.
- Staff has ignored the objective tools that it should have employed, namely the visual simulations and the increase in visibility maps.
- Staff has subjectively overreached in its application of the CEQA threshold of significance by relying solely on setting, association, and feeling.
- Staff has incorrectly concluded that the PSEGS alone would destroy the integrity of the PRGTL, thereby rendering it ineligible for listing.
- Staff has failed to meet its burden demonstrating that its proposed mitigation (new **CUL-1**) bears any nexus to the impact it claims, and in fact such mitigation is unsupported by the Native American tribes with interest in the region.

(i) Staff's Newly Created PRGTL Should Be Rejected

The Committee must recall that Staff identified a landscape that would be cumulatively affected by all of the I-10 corridor renewable energy projects and named it the PTNCL. The basis of the PTNCL included the very trails described in Staff's slide show presented at the evidentiary hearing on October 28, 2013. Now Staff has expanded this concept by creating a new landscape, the PRGTL, which has been applied solely to the PSEGS. Staff admits that its new PRGTL is in effect a simple expansion of the PTNCL and Staff provides no new knowledge to support its creation of the new PRGTL. Staff stated in the FSA:

> Staff now understands the PTNCL to itself represent, simultaneously, small geographic and temporal portions of a much broader, regional Pacific to Rio Grande Trails Landscape (PRGTL), a cultural landscape that encompasses three primary trail corridors from the southern Pacific coast of California across the deserts and the Colorado Plateau of the Southwest to the northern Rio Grande Valley in what is now New Mexico. Staff believes that the focus here on the Chuckwalla Valley portion of the PRGTL is appropriate to the consideration of the amended project.[11]

[11] Exhibit 2001, pages 4.3-83 through 4.3-84.

Yet Staff provides no support that the PSEGS amendment requires this immense expansion or that Staff acquired new information that was unavailable to it at the time of the original licensing proceeding to justify this wholesale expansion of the cultural landscape. In fact, the contributing elements to this new cultural landscape are the same elements used to justify creation of the original PTNCL. Staff appears to be applying an arbitrary and capricious standard to the PSEGS amendment, which was highlighted recently in the Blythe Solar Power Project (BSPP) amendment proceeding. In response to direct questioning from counsel to the Colorado River Indian Tribes (CRIT) for the BSPP proceeding[12], Staff said that the PTNL is part of the PRGTL; yet even though the BSPP negatively impacted the PTNL, it did ***not*** impact the PRGTL. This was the sole basis for Staff's decision not to modify mitigation for the PTNL in BSPP, but faced with similar facts in this proceeding, Staff arbitrarily created a whole new mitigation strategy for the PSEGS. Staff has provided no reason and certainly no substantial evidence that was unavailable to it at the time of the licensing proceeding for the Approved Project that would support the wholesale expansion of the PTNL and creation of the PRGTL. Therefore, the Commission should reject Staff's creation of the PRGTL for this amendment proceeding.

(ii) Environmental Baseline

It is undisputed that the CEQA baseline for the analysis of the PSEGS is set forth in Commission Regulations Section 1769. CEQA also provides guidance and support that the environmental baseline for evaluation of impacts must include the Approved Project as if it was constructed and operating.[13]

Staff's position was summarized by Mr. Gates:

> the primary scope of staff's cultural resources analysis for the amended project is a consideration of the ***extreme intensification of the visual effect that the amended project would have on cultural resources*** beyond the physical footprint of the project.[14] (emphasis added)

And in comparison to the analysis performed for the Approved Project, Mr. Gates described the difference in the Potential Area of Affect (PAA) as follows:

> The original analysis for the original project only took into account the physical and visual effects that the original project ***would have had on***

[12] PSH requests that the Committee take official notice of the evidence presented by Staff in the BSPP amendment proceeding (09-AFC-6C) since the Committee for PSEGS and the Committee for BSPP are the same Commissioners.
[13] Public Resources Code Section 21166, CEQA Guidelines 15162 and 15163. See also *Black Property Owners Association v. City of Berkeley* 22 Cal. App. 4th 974; *Benton v. Board of Supervisors* 226 Cal. App. 1467
[14] 10/28/13 RT 31

> ***and immediately adjacent to the original project's footprint due to the relatively low intensity of the original project's visual intrusion on the broader landscape.***[15] (emphasis added)

It is this difference in visual intrusion and intensification that Staff asserts is the cause of the impacts to its newly delineated PRGTL. To better understand this difference, it is helpful to consult the Final Decision for the Approved Project. The Commission did not limit the PAA for the Approved Project as asserted by Mr. Gates. The Final Decision describes the PAA for cultural resources as:

> For ethnographic resources, the PAA for the proposed project is expanded to take into account traditional use areas and traditional cultural places which may be further afield than the project site footprint or the project vicinity. The areas of analysis for ethnographic resources may include ***viewscapes that contribute to the historical integrity of a subject resource.*** Ethnographic resources are often identified in consultation with Native Americans as well as other ethnic or cultural communities, and issues that are raised by these communities may define the PAA. ***For this project the ethnographic PAA is the geographic area around and including the proposed project where the project has the potential to physically or visually degrade ethnographic resources.***[16] (emphasis added)

Further, the Final Decision described the visual setting and viewshed of the Approved Project in a similar manner as Staff described the viewshed for the Modified Project. The Final Decision states:

> There are a number of sensitive land uses and protected areas within the expansive viewshed of the site including: to the north – Palen Dry Lake and Sand Dunes Area, Desert Lily Sanctuary Area of Critical Environmental Concern (ACEC), and Joshua Tree Wilderness; to the northeast – Palen McCoy Wilderness; to the east – Palen Dry Lake ACEC and Ford Dry Lake OHV Area; to the south – Chuckwalla Mountains Wilderness; and to the west – Alligator Rock ACEC and Desert Center. This portion of Chuckwalla Valley offers panoramic views of a desert plain landscape that appears relatively visually intact except for the presence of I-10 to the immediate south and two transmission lines. I-10 is the main

[15] Ibid.
[16] Final Decision, Cultural Resources, page 13.

> travel corridor between Southern California and Phoenix, Arizona. (Ex. 301, p. C.12-6.)[17]
>
> ***The viewshed or area of potential visual effect (the area within which the project could potentially be seen) is extensive and encompasses much of Chuckwalla Valley and the site facing slopes and ridgelines of the surrounding mountains. A feature of this desert landscape is the potential for large projects to be seen over great distances where elevated viewpoints exist, due to the large open areas of level topography and absence of intervening landscape features.*** (Ex. 301, p. C.12-7.)[18] (emphasis added)

The Final Decision also included Visual Resources Figures 1 and 2, which demonstrate the expansiveness of the viewshed from which the Approved Project was visible. Further, the Final Decision concluded that the Approved Project would have resulted in a substantial adverse effect on the Chuckwalla Valley scenic vistas.

> Although no designated scenic vistas were identified in the study area, panoramic and highly scenic vistas are available to backcountry recreationists who access the southern ridges of the Palen McCoy Wilderness and the northeastern ridges of the Chuckwalla Mountains Wilderness. Both areas overlook the expansive Chuckwalla Valley ringed by distinguishable mountain ranges. The evidence indicates that the PSPP will be prominently visible from both wilderness areas and the introduction of industrial character and structural visual contrast will result in substantial adverse effects on these vistas. (Ex. 301,p. C.12-21.)[19]

The Final Decision also concluded that the Approved Project would cause daytime glare impacts to receptors throughout the viewshed.

> Potentially affected receptors include motorists on I-10, travelers and recreationists on the nearby BLM recreational access roads, visitors to the Palen Dry Lake and SandDunes recreation areas and other ACECs in Chuckwalla Valley, and visitors to the Joshua Tree Wilderness, Palen McCoy Wilderness, and Chuckwalla Mountains Wilderness. Any visible glare or reflected light will draw viewers' attention to the facility, even from distant locations.[20]

[17] Final Decision, Visual Resources, page 1.
[18] Final Decision, Visual Resources, page 2.
[19] Final Decision, Visual Resources Section, page 9.
[20] Final Decision, Visual Resources Section, pages 9 and 10.

Ultimately, the Commission concluded:

> We therefore find that the PSPP will have a substantial adverse effect on a scenic vista, degrade the existing visual character of quality of the site and its surroundings, and create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area.

It is this environmental baseline, the Approved Project's substantial adverse effect on Chuckwalla Valley, to which the Modified Project's effects must be compared. And as the PAA described in the Final Decision makes clear, the analysis of the Approved Project was limited to the areas near the footprint of the project but included the very cultural resource regions that Staff uses to support its PRGTL. These are the same contributing elements as the PTNL of the Approved Project. Therefore, the Commission should be analyzing whether the increase in visibility on the contributing elements to the PTNL ***cause new impacts to cultural resources.***

(iii) Threshold of Significance

For Cultural Resources analysis, it is insufficient to cease analyzing potential impacts after concluding that the Modified Project would have a significant visual effect. Staff bears the burden of identifying specifically how that visual effect creates a significant impact on cultural resources, including specifically how the mitigation proposed bears a legal nexus to that identified significant impact. Staff does neither.

In order to establish that a proposed action results in a significant impact under the CEQA it is required and common practice to establish a Threshold of Significance (TOS). If the proposed action results in an effect that is above that TOS then it will result in significant impacts. If the effect is below the TOS then it will not result in significant impacts. It is this fundamental theory that allows an ***objective analysis*** to occur rather than a ***subjective*** one.

Staff and PSH agree that the CEQA threshold for significance for determining a cultural resources impact due to visibility is whether or not the visual intrusion is sufficient to cause the cultural resource to no longer be eligible for listing on the California or National Register of Historic Places.[21] Further, PSH and Staff agree that in order for a Cultural Resource to be eligible for listing, it must retain enough, not all, of its ***integrity*** to convey the aspects that cause it be eligible for listing in the first place.[22] Staff claims that the

[21] Exhibit 1077, Cultural Resources Testimony of Mary Barger and Fred Nials.
[22] 10/28/13 RT pages 45 and 46, Mr. Mcguirt; and Exhibit 1077.

addition of the solar towers destroys the integrity of the cultural landscape in such a manner that it can no longer be listed.

Title 14 CCR Section 2852 (c) defines integrity as follows:

> (c) Integrity. Integrity is the authenticity of an historical resource's physical identity ***evidenced by the survival of characteristics that existed during the resource's period of significance.*** Historical resources eligible for listing in the California Register must meet one of the criteria of significance described in section 4852(b) of this chapter and retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance. Historical resources that have been rehabilitated or restored may be evaluated for listing.
>
> ***Integrity is evaluated with regard to the retention of location, design, setting, materials, workmanship, feeling, and association. It must also be judged with reference to the particular criteria under which a resource is proposed for eligibility.*** Alterations over time to a resource or historic changes in its use may themselves have historical, cultural, or architectural significance.
>
> It is possible that historical resources may not retain sufficient integrity to meet the criteria for listing in the National Register, but they may still be eligible for listing in the California Register. ***A resource that has lost its historic character or appearance may still have sufficient integrity for the California Register if it maintains the potential to yield significant scientific or historical information or specific data.*** (Emphasis added)

As described In Exhibit 1077, the National Park Service (NPS) in Bulletin 34 has defined seven aspects of integrity to assist in determining the eligibility of a property: location, design, setting, materials, workmanship, feeling and association.

Ms. Barger explained in her testimony at the evidentiary hearing

> Integrity for cultural resources is usually defined by the National Park Service guideline set forth in Bulletin 15. There are seven aspects of integrity that staff has discussed. Staff has stated, and today they did too, that three of these factors, the integrity of setting, feeling, and association will be lost by adding these two towers.
>
> Much of the interpretation of setting, feeling, and association is subjective. In fact, the Park Service actually states, quote, "Because feeling and association depend on individual perceptions, their retention [alone] is

never sufficient for its eligibility of a property for the National Register," unquote. I do feel that evaluating these factors is subjective in nature and can vary from person to person.[23]

Therefore, in order for the Commission to find that the visual intrusion of the PSEGS on the cultural landscape is a significant impact under CEQA, it must find that the intrusion destroys the integrity of the cultural landscape such that it would no longer be eligible for listing. For the reasons discussed below, the PSEGS does not destroy the integrity of the cultural landscape.

(iv) The Cultural Landscape Retains Integrity and Remains Eligible For Listing

Staff concluded that the PRGTL integrity is not affected by the visual effects from existing solar projects, roads, transmission lines, Eagle Mine, etc., nor would it be affected by the Approved Project. To be clear, these facilities include the Genesis Solar Energy Project, the Desert Harvest Solar Project, the Desert Sunlight Energy Project, the Red Bluff Substation, several high voltage transmission lines, Interstate-10 and its vehicular traffic, the Town of Desert Center, including its raceway and airport, and other developments that can be seen from the mountaintops identified by Staff. This analysis must also include the projected visibility of the Approved Project.

Notwithstanding the presence of these other industrial visual intrusions, staff asserts that the introduction of the solar towers alone would "tip the balance" and cause the cultural landscape to become ineligible for listing. Staff bases its determination solely on its subjective perception of setting, association and feeling, in direct contradiction to the NPS Bulletin 15 guidance described above. Staff failed to objectively analyze the impacts the greatest evidence of the lack of objectivity is its failure to use the difference in visibility map provided by PSH as Exhibit 1025 and the full Visual Resource Analysis provided in Exhibit 1034. Exhibit 1025 provides a clear delineation of where the PSEGS can now be seen **in areas where the Approved Project was not visible.** As Exhibit 1025 clearly shows, the additional viewshed is quite small. Staff should have been focusing on this change in visibility for its analysis of whether the change in visibility creates new or different impacts on cultural resources. PSH created Figure 1, which is attached to the Cultural Resources Testimony, Exhibit 1077, to identify Staff's contributing elements to its PRGTL overlaid with the change in visibility areas. This figure shows that the additional viewshed from the Modified Project that intersects Staff's contributing elements is smaller still. While Staff continues to assert that the solar towers are bright and intense, when viewed from the remote areas shown on Figure 1 – the specific areas that Staff asserts contribute to its new cultural landscape – the towers are so far removed to make them nearly imperceptible. This is clearly shown on the visual simulations provided to Staff for its visual analysis on Exhibit 1034. These visual simulations were shown by Ms. Barger at

[23] 10/28/13 RT pages 67 and 68

the evidentiary hearing and while the visual experts agree that it is difficult to capture through photography or visual simulations the true brightness, they are the best evidence available for the Commission to use. Even if the towers seem actually brighter than shown by photographs or visual simulations, Ms. Barger testified that although they will impact the setting, due to the remoteness of the elements and the vast expanse of the landscape the addition of the towers are not sufficient intrusions to destroy the integrity of the cultural landscape.[24] Ms. Barger provided the most helpful objective guidance for understanding integrity:

> Staff has stated that the landscape and the contributing elements are eligible for the California Register of Historic Places under criterion 1, 3 and 4. So 1 is associated with tribal use. I'll summarize that. Rock art for criterion 3. Criterion 4 is for archaeological sites for information potential.
>
> I agree with these evaluations. In my work with the federal government, I have had a lot of experience applying National Register's (inaudible) state criteria. In looking at the Park Services guidance on evaluating integrity, it asks the question, does the property retain the identity for which it is significant? Much of the traditional landscape is based on physical features, the mountains, the drainages, the valleys. And Alligator Rock is an example.
>
> The Park Service provides guidance on understanding natural features as part of the landscape. They ask, are they unobscured by modern construction or landfill? So I would argue that the physical features of the landscape are unobscured. So can we still see these features and can we still recognize them and appreciate them?
>
> Another important question the guidance offers is, would a historical contemporary recognize the property as it exists today? I believe someone from a time period prior to any modern construction could still recognize the mountains, the Chuckwalla Valley, the locations of the springs, Palen Dunes, and Alligator Rock, just as examples. They might wonder what on earth have you people been doing out here and what are these things out here?
>
> At one end of the continuum, think of the island of Manhattan. Would a person from the past recognize that island as it looks today? I think that's unlikely. However, here due to those large vistas and multiple mountain ranges, the towers are visible, but the landscape is easily recognizable. I believe that a person can still find and follow the trails to different locations in this landscape.

[24] 10/28/13 RT 68.

> It seems that the staff has set a really high threshold of significance for the landscape. So as a result, staff stated that the towers would profoundly and irreparably degrade the ability of the landscape to convey its historic significance.
>
> I believe, as I described, that the landscape is still intact. The physical features and all of the contributing elements listed in the final staff assessment are all present. These include the petroglyph sites, the springs, mountains, foothills, Palen Dry Lake ACEC. They're all physically unaffected by the addition of the two towers.
>
> I believe this landscape, the Chuckwalla portion of Pacific to Rio Grande Trail landscape is still eligible, and it's still eligible under all of those three criterion.[25]

Therefore, using an objective standard and applying the legally recognized TOS, the Commission should find that the Modified Project, although visible from the contributing elements of the cultural landscape, does not impact the integrity for the criteria the landscape can be listed. After the PSEGS, the cultural landscape would still be eligible for listing.

If the Commission agreed with Staff's finding that the cultural landscape is not eligible for listing, such agreement may set a precedent for other actions that might actually impact the cultural landscape in the future. For example, if a project were to be constructed immediately adjacent to Dragon Wash, wouldn't the applicant of that project argue that there is no cultural landscape because the PSEGS made it ineligible for listing? This is not a desirable nor legally supported outcome.

(v) Condition of Certification **CUL-1** Should Be Rejected

As described above, Staff's Condition of Certification **CUL-1** is unwarranted because the PSEGS does not significantly impact the cultural landscape. Notwithstanding the fact that new mitigation is unwarranted, Staff has provided no legal nexus to the mitigation actions it proposes in **CUL-1** to the impact it claims is significant. Staff's **CUL-1** is also extremely burdensome, requires uncapped mitigation and requires millions of dollars' worth of unwarranted surveying. For example,

- The condition requires surveys that would involve over a hundred square miles and that could take up to 200 days with multiple personnel to complete.
- The condition requires contribution to a special fund set up for revising a field manual for a landscape that covers six states. The condition fails to

[25] 10/28/13 RT pages 73 through 75.

adequately describe the scope of work and time frame for the effort the required contribution is neither quantified nor capped.

- The condition requires funding of a steering committee and allows the steering committee to develop an unspecified amount of compensation to those who ascribe heritage values to the resources. No guidelines are provided for the establishment and make-up of the committee, nor for the procedures under which it is to make decisions. No financial contributions from the Petitioner to the committee itself or the parties to be compensated are quantified or capped.

Uncapped financial obligations are not only unfinanceable but indefensible when the Commission is asked what relation the mitigation bears to the impact. Staff fails to provide ***any*** nexus of how any of these actions would in fact contribute towards mitigating the impact it asserts. In fact, Staff is clear that even with the mitigation imposed by **CUL-1** the impacts are immitigable. Public comments received from Native American tribal representatives also agree that Condition of Certification **CUL-1** does not mitigate the impact of the PSEGS which they describe as spiritual in nature. Just as important, imposition of mitigation that bears no nexus to the claimed impact violates CEQA.

The impact that was identified in the Final Decision for Approved Project to the cultural landscape is a cumulative impact. That is, the Approved Project, along with the other projects in the area, contributes to cumulative degradation of the cultural landscape. PSH accepts that the PSEGS also contributes to this cumulative impact and therefore is supportive of retaining Condition of Certification **CUL-1** in the Final Decision. If the Committee believes that the introduction of the towers results in a greater contribution to the cumulative effect, PSH is willing to double the contribution required by the existing **CUL-1** from $35 per acre to $70 per acre to address this concern.

CONDITION OF CERTIFICATION CUL-10

PSH provided recommended modifications to Condition of Certification **CUL-10** in its Rebuttal Testimony in an attempt to encourage avoidance of cultural artifacts in the solar field where it is feasible to do. For reasons unknown to PSH, Staff has rejected the proposed modifications. Based on Staff's rejection, PSH withdraws the modifications and agrees to the version of Condition of Certification **CUL-10** that is contained in the Final Decision for the Approved Project.

CONDITION OF CERTIFICATION CUL-11

PSH provided the following comment in its Final Comments on the PSA and since it was rejected by Staff, renews its request.

Condition of Certification **CUL-11** was developed to ensure that certain sites were further evaluated and, if necessary, data recovery was performed ***prior to construction that could potentially disturb them***. However, the verification is inconsistent with the condition language which allows construction to take place elsewhere for the project as long as the activities were not within 30 meters of the potential sites. PSH proposed in its Initial Comments to simply modify the verification language to be consistent with the language in the condition. At the Workshops, Staff explained that it wanted to revisit the concept of allowing construction to occur within 30 meters of a site that would need additional evaluation pursuant to the condition and indicated that it may modify the condition to provide an interim analysis step to determine whether the buffer distance should be 30 meters or some other distance.

As described in the FSA, Staff simply rejected the concept that construction could take place on the site in the manner currently allowed by the Condition of Certification for the Approved Project. Specifically, the Approved Condition of Certification includes the following language

> If allowed by BLM, prior to **ground disturbance within 30 meters of the site boundaries of each of these sites**, the project owner shall ensure that the CRS, the PPA and/or archaeological team members implement the plan, which, for sites where CARIDAP does not apply, shall include, but is not limited to the following tasks: (**emphasis added)**

The Commission allowed this specific language for the Approved Project even though the Approved Project involved mass grading across the site and involved movement of more than 4.5 million cubic yards of soil. Yet Staff refuses to acknowledge that construction on the site for the PSEGS, which involves 22.5 times less grading than the Approved Project, poses less risk to these sites. In fact, with the additional survey work, geoarchaelogy studies, and on-site trenching to support the PSEGS amendment that have been performed since the Final Decision, there has been no scientific reason offered that would justify the Commission removing the flexibility previously adopted by the Commission in the Final Decision.

To ensure the Condition is interpreted and implemented correctly, we request the specific direction be also included in the Verification in the manner outlined below:

1. At least 45 days prior to ground disturbance **within 30 meters of the "prehistoric sites"**, the project owner shall notify the CPM that data recovery for small sites has ensued.

In addition, with the additional survey work performed in support of the Amendment for the PSEGS, it is clear that Site SMP-P-2018 is a simple prehistoric site without features and therefore it should be removed from Condition of Certification **CUL-12** and added to the list of sites in **CUL-11**.

CONDITION OF CERTIFICATION CUL-12

Staff rejected PSH's request to modify the Verification language of Condition of Certification **CUL-12** so that it is consistent with the language contained in the actual condition. For the same reasons discussed under Condition of Certification **CUL-11** above, we request the following modification to the Verification.

1. At least 45 days prior to ground disturbance **within 30 meters of the "complex PreHistoric sites"**, the project owner shall notify the CPM that data recovery for large complex sites has ensued.

Again, Site SMP-P-2018 should be deleted from Condition of Certification **CUL-12** and added to the list of sites in **CUL-11**. In addition, the additional 2013 archaeological surveys and field checks performed in support of the Amendment for the PSEGS identified two new prehistoric sites with features. These sites, MH-009 and MH-010, should be added to the list of sites outlined in the Condition of Certification **CUL-12.**

CONDITION OF CERTIFICATION CUL-13

Staff rejected PSH's request to modify the Verification language of Condition of Certification **CUL-13** so that it expressly states that construction activities that have no potential to disturb these sites can proceed prior to implementation of the condition. This would be consistent with the other Conditions of Certification which allow that flexibility. For the same reasons discussed under Condition of Certification **CUL-11** above, we request the following modification to the Verification.

1. At least 45 days prior to ground disturbance **within 30 meters of the "Historic Period Refuse Scatters"**, the project owner shall notify the CPM that mapping and upgraded artifact analysis has ensued on the historic-period refuse scatter sites.

In addition, the additional 2013 archaeological surveys and field checks performed in support of the Amendment for the PSEGS identified eleven new historic refuse scatters that may date to the time period of the Desert Training Center Cultural Landscape. These sites, MH-001, MH-002, MH-003, MH-006, MH-008, MH-010, MH-011, MH-012, MH-013, MH-014, and MH-015, should be added to the list of sites outlined in the Condition of Certification **CUL-12.**

CONDITION OF CERTIFICATION CUL-14

Staff rejected PSH's request to modify the Verification language of Condition of Certification **CUL-14** so that it expressly states that construction activities that have no potential to disturb these sites can proceed prior to implementation of the condition. This would be consistent with the other Conditions of Certification which allow that flexibility. For the same reasons discussed under Condition of Certification **CUL-11** above, we request the following modification to the Verification.

1. At least 45 days prior to ground disturbance **within 30 meters of the "Historic Period Sites with Features"**, the project owner shall notify the CPM that mapping and upgraded artifact analysis has ensued on the historic-period sites with features.

During the August 2013 surveys to support the PSEGS amendment, one historic site with two features was recorded. This site, MH-007, is an artifact concentration of cans, glass, a kerosene lamp and two lids to a wood stove. The second feature is a hearth with rocks slightly buried and historic artifacts around it. Numerous other historic artifacts are present including oil cans. This site should be added to this condition.

CONDITION OF CERTIFICATION CUL-16

Staff deleted Condition of Certification **CUL-16** over PSH's and BLM's objection. At the PSA Workshops and again at the evidentiary hearing, BLM expressed a strong preference that this condition be left in place[26]. PSH supports inclusion of the condition because it provides clear direction if there is a dispute between Commission and BLM Staff when it comes to compliance with federal requirements applicable to cultural resources and requests. Staff is incorrect in its assertion that the reason for its inclusion for the Approved Project was related to coordination on the joint documents. The reason for its inclusion is to simply recognize that when it comes to implementation of cultural resource requirements under the Programmatic Agreement (PA) on BLM managed land, BLM is the final arbiter.

Staff has failed to provide any credible evidence or reason that inclusion of **CUL-16** in the Final Decision would cause any harm. PSH requests the Commission retain Condition of Certification **CUL-16** in the Final Decision.

CONDITION OF CERTIFICATION CUL-17

Staff has added a new burdensome and costly Condition of Certification **CUL-17** that was not required for the Approved Project and was not included in the PSA. Compliance with **CUL-17** would require PSH to survey 10 square miles, including acquisition of mining assays, to mitigate potential visual impacts to the Ironwood Mining District. Staff has provided no evidence that the PSEGS amendment causes any impact due to visual

[26] 10/28/13 RT pages 147 through 148

degradation to the Ironwood Mining District and, therefore, Condition of Certification **CUL-17** should be deleted.

As discussed in PSH's objection to Condition of Certification **CUL-1** above, any evaluation of impacts must consider whether the proposed action, in this case modifying the technology to include the two power towers, would significantly impact any attribute of a cultural landscape or resource in such a way as to prevent the landscape or resource from retaining enough of the integrity of that attribute to be eligible for listing. Staff opines that the Ironwood Mining District would be eligible for listing under all the Criteria yet provides no analysis of why it comes to that conclusion. This assumption fails to take into account that the significance of the Ironwood Mining District, if it was ever evaluated for listing, would be related to ***subsurface geologic materials and mining methods***. While Staff assumes that the resource is eligible, Mr. Nials testified that based on his significant experience in Nevada evaluating whether mining districts were eligible for listing and based on his review of the available information, his opinion, the only opinion in the record, is that the Ironwood Mining District would not be eligible for listing.[27]

Mr. Nials also testified that the type of mining that was performed did not leave historic structures (such as head frames) behind. The only evidence of the mining activity is the ground disturbance left from blading and bulldozing the landscape.[28] So although the district is not likely to be eligible for listing, the only reason it *could* be eligible would be solely due to subsurface geology and mining methods employed there, not because there are any picturesque mining features. These attributes are completely unrelated to the view from the mining district towards the Chuckwalla Valley.

Further, Staff has made another incorrect assumption. The main mining claims that would be the contributing elements to this district are on the eastern slope of the Palen Mountains. However, since the PSEGS is located west of the Palen Mountains, the towers would ***not be visible from the mining claims***.[29] There simply is no impact to the eligibility of the Ironwood Mining District caused by the visibility of project components.

Equating visibility alone with a significant impact on any cultural resource that could be potentially listed lacks any nexus to tie the impact to the threshold of significance. This approach is inconsistent with CEQA and should be rejected. If this approach were to be applied uniformly, any industrial development would be automatically considered to impose a significant impact on any resource that could be listed for any reason, whether or not the resource's potential significance related to the surrounding viewshed. Consider the Town of Desert Center. There are historic buildings in the Town of Desert Center that may be eligible for listing. If the Commission adopted Staff's approach, locating any project where it could be viewed from one or more of said buildings would not render the

[27] 10/29/13 RT pages 84 through 85.
[28] 10/29/13 RT page 83.
[29] 10/29/13 RT page 84; see also Figure 1 attached to the Testimony of Mary Barger and Fred Nials, Exhibit 1077.

buildings ineligible for listing – unless it was the viewshed that was an important characteristic of why the buildings were eligible.

Therefore, we request the Commission to reject the harmful precedence that would result from Staff's lack of nexus analysis between any effect and the characteristic of the resource. Additionally, the PSEGS cannot be seen from the very mining claims that Staff claims are the contributing elements to the district. For these reasons the Commission should reject finding of significant impact to the Ironwood Mining District and delete Condition of Certification **CUL-17** as unwarranted.

2. BIOLOGICAL RESOURCES

The sole dispute with Staff involves the amount of indirect impacts predicted to occur to Mojave Fringe Toed Lizard habitat from interference with sand transport. Staff previously evaluated the Approved Project using a sand transport model (the PWA Model). Staff commissioned an evaluation of the PSEGS using the same PWA model (Lancaster 2013). PSH commissioned a sand transport study which was conducted by Fred Nials. It is important to note that Mr. Nials and Dr. Lancaster (Staff's aeolian expert) agree that the PWA model is inaccurate because of project design changes, flawed assumptions in the original model, and inadequate climate and wind data. For lack of better alternatives, however, the PWA Model parameters were used in the model currently accepted by CEC staff.

The PSEGS project was re-designed specifically to minimize impacts on the wind transport system. Thirty-foot high impermeable wind fences have been replaced by wind-permeable tortoise and chain link fences. To the extent possible, corners and sharp angles in the project perimeter were eliminated to minimize sand trapping, and the perimeter fence was realigned to more closely follow the prevailing wind direction. Solar troughs have been replaced by heliostats arranged concentrically about two generation towers. The concentric arrangement minimizes the wind blockage profile for a significant part of the heliostat field especially along the critical northeastern boundary and southwestern portion of the project. Water management channels will not be excavated within the heliostat field and the natural relationship of stream orders will be maintained.

PSH does not deny the fact that the PSEGS facility will cause blockage to unimpeded wind flow and sand transport, and that a change from solar trough to heliostat technology results in a change of deposition loci. In order to adequately evaluate potential effects on sand transport, the effects of fences, structures, orchards and agricultural fields in nearby areas were examined in order to see real, not modeled, effects of transport blockage. Based on these observations, extremely conservative estimates of impact on the sand transport system were calculated and a mitigation plan was devised based on the area of more than 50% estimated sand blockage. CEC has performed additional modeling using the PWA Model and arrived at similar estimates of impact to sand transport.

The primary differences between PSH and CEC, then, are evaluations of the nature of effects of sand transport blockage and impact on MFTL habitat, which leads to different proposed amounts of habitat mitigation lands.

As with the original PWA Model, some staff assumptions cannot be substantiated. For example:

ASSUMPTION: Interruption of sand transport by removal of sand automatically and inevitably results in deflation and deflation automatically and inevitably results in loss of MFTL habitat.

RESPONSE: This assumption was challenged by applicant, and the CEC aeolian consultant (Dr. N. Lancaster) agreed that the PWA Model is flawed. As discussed in Dr. Lancaster's report at Page 3,

> The PWA Model differs from these and other cellular automation sand transport models in that it does not provide for erosion and/or deposition of sand and therefore does not provide information on how spatial variations in sand transport may affect landforms and associated cultural and biological resources. In addition, the model does not incorporate a time dimension. As described, sand is moved from one cell to another over one time interval only – in this case a year. All other sand transport models incorporate multiple time steps so that the distribution of sand evolves over a realistic time period (multiple years) and areas of net erosion and deposition can be identified. There is no feedback between the cells in the PWA model. ***In reality, sand moved from point A to point B may be transferred back to point A, or to other cells depending on the wind direction. No account is taken in the PWA model that sand may be deposited or eroded in a differential manner and pile up to form dunes or be scoured from other areas.*** (emphasis added)

And at page 4,

> The model therefore predicts the spatial pattern of the degree to which *potential* sand transport is changed by obstacles, ***but it does not provide for the effect such changes may have on the erosion and/or deposition of sand***. (emphasis added)

And at Page 21,

> The PWA sand transport model ***has significant limitations in its abilities to predict where erosion and deposition of sand may occur***. Such information is valuable to the Applicant for site design and implantation of any sand control measures that may be needed. ***It is also valuable for***

assessing the impacts of infrastructure on habitat for flora and fauna (e.g. the Mojave Fringe Toed Lizard). (emphasis added)

Both Mr. Nials and Dr. Lancaster agree that the PWA Model predicts that the areas on the northeastern and eastern side of the PSEGS site will have less sand transport. Mr. Nials believes that, for the reasons identified in Dr. Lancaster's report, the model over predicts the effects on the northeastern and eastern boundary of the site.

Further, both experts agree that the potential areas of effect, predicted by the PWA Model and shown on Mr. Nials report, do not represent areas of erosion or deflation. They simply represent areas which receive less sand "transported" to them. In other words, despite receiving less sand than before they may also have less sand "transported from" them, and, these areas can continue to maintain sand levels sufficient to support MFTL.

Staff's assumption that sand blockage equates to deflation at a level that cannot support MFTL is simply not supported by the model and is not supported by field observations. While some areas of deflation are likely to occur in Chuckwalla Valley, deflation is not inevitable, nor is it uniform. Without the large amounts of deflation that are stated by Staff, the loss of large amounts of MFTL habitat offsite cannot be presumed simply because of wind blockage of sand.

ASSUMPTION: Sand deposited within project boundaries is "locked in place" and permanently removed from the transport system.

RESPONSE: Existing drainage systems already remove minor amounts of sand from Zone IV within project boundaries by runoff, but at present there is little free sand to remove. Upon installation of the heliostat field, however, larger quantities of sand will be deposited in that area. According to Dr. Lancaster's report, most of the sand will be deposited within approximately 1/3 mile of the eastern project boundary, an area that coincides with one of the larger drainages in the area. Runoff from occasional storms will transport a portion of the deposited sand into potential MFTL habitat. Some storms will produce large amounts of runoff and transport the sand through Zones III and II onto the floor of Palen Dry Lake. However, increased sediment load (aeolian sand entrained by runoff) will result in increased deposition outside project boundaries before reaching the playa bottom, producing a *de facto* replacement for some sand removed in other areas of the project. This sediment can be subsequently entrained by wind and transported to the sand corridor just as it is today, only in larger quantities.

Since percentage of sand blockage does not equal deflation it cannot be argued that the resultant habitat would be unsuitable for MFTL. Therefore, Staff's extremely conservative indirect impact estimate of 421 acres is not supported. In order to provide a compromise, we have assumed that areas where the input of sand is predicted to be blocked by 50 percent or more (overestimate) will result in an indirect but significant impact to MFTL habitat. This area is estimated to be 178 acres in accordance with Exhibits 1050 and

1071. Therefore we recommend that the Committee modify Table 29 in Condition of Certification **BIO-29** to reflect 178 acres of indirect impacts to MFTL with the commensurate mitigation of 89 acres at a 0.5:1 ratio.

3. GEOLOGY/PALEONTOLOGY

The FSA includes flawed analyses that conclude that the PSEGS will result in more impacts to paleontological resources. The basic premise upon which Staff relies is that the vibratory installation of the heliostat pylons does not result in the excavation of subsurface material. In Staff's opinion, it is this lack of excavated material that could result in an impact to a buried fossil from insertion of the pylon that may render the fossil "undiscovered". Staff then claims that this will be an impact. To mitigate this impact, Staff has proposed Condition of Certification **PAL-9** because it believes that the PSEGS poses more of a risk of impact to paleontological resources than the original project. This opinion is based solely on Staff's speculation of destruction of fossil resources with the vibratory technique of pylon insertion and that uncovering of fossils during mass grading is preferred to leaving them in place. This concept is new and runs contrary to many other environmental disciplines where avoidance is preferred; most notably, Cultural Resources. We believe the Native American tribes prefer avoidance and less disturbance. Staff's Condition of Certification **PAL-9** would require new disturbances that would otherwise be avoided.

First, Staff overestimates the sensitivity of the site for the presence of fossil resources. While it is clear that there is some potential for fossil resources, Staff ignored the information provided by PSH in its Response to Data Requests 76, Attachment 76-1 of Exhibit 1060, which clearly indicates that the potential for fossil discovery is low across most of the PSEGS site.

Second, Staff overestimates the effectiveness of the mitigation adopted for the Approved Project when comparing the effects of the PSEGS. The original project would have conducted mass grading across the site, including the installation of miles of large drainage channels. The total amount of mass grading for the Approved Project would have been 4.5 million cubic yards of cut and fill. In contrast, the PSEGS grading would include approximately 200,000 cubic yards of cut and fill. This represents 22.5 times less grading, a reduction of over 95 percent in the amount of disturbance over the Approved Project.

Lastly, Staff overestimates the probability that a pylon would encounter **AND** destroy a fossil resource. While it is true that the PSEGS will install up to 170,000 heliostats across the solar fields, Attachment 76-1, or Exhibit 1060 correctly places this into context and concludes:

> Consider, however, the following: emplacement of the 8-inch diameter pylons for the entire field will disturb a total surface area of only 1.4 acres.

> The disturbance over the total area of the project is thus less than 0.04 % of the total facility area. Further, it is conservatively estimated that less than 20 % of the total project area has any possibility of encountering anything other than coarse-grained fanglomerates within a depth of 4-8 feet. Thus, less than 0.01 % of the pylons have any realistic probability of encountering significant fossils. Given the frequency of fossil recovery in the previous paleontological survey, the probability of damaging buried fossil remains is astronomically small.

Ignoring the low probability that fossils would be damaged by pylon installation Staff then claims that since there is no ability to monitor the area where the pylons will penetrate, the impact cannot be mitigated. It is these "unmitigated" impacts that Staff uses as the basis that the findings contained in the Final Decision, namely that the Approved Project would not result in significant impacts to paleontological resources, are no longer valid for the Modified Project.

Staff has made a significant flawed assumption – namely, that monitoring of the 4.5 Million cubic yards for the Approved Project would provide full mitigation because it will yield valuable fossil data. This assumes that the monitoring activities will actually "see" all of the soil that would have been moved for the Approved Project. Even in the unlikely event that the monitoring activities "observed" 50 percent of the graded soil, which would be an extremely high efficiency rate considering the logistics of mass grading operations, the monitoring activities for the Approved Project would yield over 2 Million cubic yards of graded soil that would be "unobserved". The failure to observe the disturbed material would produce no fossil data under the mitigation proposed in the Final Decision for the Approved Project. Yet Staff concluded, for the Approved Project, that impacts would be less then significant despite the fact that over 2 Million cubic yard of graded soil would not be observed for fossil content.

With respect to the Modified Project, the total area disturbed by installation of the solar foundations that are subject of Staff's concern would not exceed a volume of approximately 22,000 cubic yards[30]. The Modified Project would grade approximately 200,000 cubic yards. Assuming again that the monitoring of the other grading activities yielded the effective rate of 50 percent "observance"[31], implementation of same monitoring program for the Modified Project would yield approximately 100,000 cubic yards of graded soil unobserved. Adding the additional 22,000 cubic yards of the disturbed soil that would similarly not be observed due to installation of the solar panel foundations would equate to approximately 130,000 cubic yards of material unobserved – a fraction of the over 2 Million cubic yards of material that would be unobserved for the Approved project. In actuality,

[30] 10/28/13 RT page 232.

[31] Actually, Mr. Nials testified as to the effectiveness of onsite monitoring that "We are probably lucky if we get, and this is a guess, 20 to 25 percent"; 10/28/13 RT page 232. Staff witness could not provide an estimate of monitoring effectiveness 10/28/13 RT 228.

the Modified Project would result in approximately a 95 percent reduction in material unobserved by the exact same mitigation protocol employed for the Approved Project. Even if the "observance" efficiency was nearly 90 percent the amount of material that would remain unobserved is still in excess of the amount of unobserved soil for the PSEGS. Staff's new condition of certification is not only unwarranted, but imposes cost and time burdens on the Modified Project in excess of the Approved Project.

For the above reasons, and to support the Native American tribes' preference for avoidance and less disturbance, we urge the Committee to conclude that a reduction in grading activities over a smaller area needed for the reduced footprint of the Modified Project results in less impacts to paleontological resources. Therefore, Condition of Certification **PAL-9** should be rejected.

In summary, we respectfully request the Commission to find that the PSEGS would result in less impact to paleontological resources than the Approved Project and reject the addition of this condition.

4. WORKER SAFETY AND FIRE PROTECTION

PSH recognizes that the construction and operation of the PSEGS will have a cumulative impact on the Riverside County Fire Department. Indeed, PSH has proposed mitigation compensation for equipment, training and ongoing support in Exhibit 1051 which PSH considers to be extremely generous considering the level of impact the PSEGS would actually cause to the Riverside County Fire Department (RCFD).

The Final Decision required mitigation compensation to RCFD in an amount equivalent to $12.1 Million over the life of the project. Staff and PSH agree that the PSEGS amendment ***reduces risk*** and, therefore, mitigation compensation to RCFD should also be reduced. However, Staff required a mitigation compensation amount equivalent to $10.39 Million over the life of project but then added an escalation component not previously required by the CEC. This total mitigation compensation will be in excess of the amount required for the Approved Project even though every expert agrees that the risks of the PSEGS are less than the risks of the Approved Project due to the removal of millions of gallons of flammable Therminol from the solar fields. PSH believes that Staff's mitigation amount is too large and overly burdens PSH to the benefit of other Riverside County solar projects currently in development or under construction.

Staff's analysis of the amount of compensation mitigation is based on assigning a portion of the costs that RCFD has requested to construct its infrastructure and providing ongoing services. It is extremely important to note that neither RCFD nor Staff conducted any assessment of exactly what infrastructure or level of support would be required ***solely due to the addition of the PSEGS***. In fact, at the evidentiary hearing, Deputy Chief Cooley of RCFD admitted that the only assessment performed was to "support projects coming to

the desert area."[32] Deputy Chief Cooley was referring to Attachment A in Riverside County's comments on the PSA.[33] Therefore, RCFD acknowledges that it has only looked at the issue as a cumulative impact, not as a direct impact as Staff now suggests. In Attachment A to Riverside County's comments on the PSA included in Exhibit 1072 RCFD estimates it needs $1.435 Million annually to support all solar development planned within eastern Riverside County, not just the PSEGS project by itself.

Staff and PSH agree on the amount of new equipment (high angle rescue) and training that is appropriate for RCFD to obtain to serve the Project. PSH's proposal of $1.2 million during construction specifically allows RCFD to purchase high angle rescue equipment and providing training to its firefighters to use that equipment. PSH's dispute with Staff's mitigation compensation is solely related to the amount Staff attributes annually to provide for firefighter support. Staff's analysis used a risk matrix assigning percentage responsibilities to each of four solar projects: the Rice Solar Energy Project, the Blythe Solar Energy Project (which will now be converted to PV), the Genesis Solar Energy Project, and the PSEGS. This approach expressly acknowledges that any mitigation compensation provided for ongoing fire and emergency services is for a cumulative effect on the ability of the RCFD to provide services to the region. In that regard, we believe that Staff has failed to incorporate the fact that any ongoing resources added to the RCFD from these four projects would also be available to support fire and emergency response for other non-Commission jurisdiction projects. In fact, Staff acknowledges these other projects throughout the FSA in its Cumulative Impact scenario. Similarly, the Commission should recognize that the RCFD will receive contributions from these other non-Commission projects and, therefore, it is fundamentally unfair to place the entire burden for constructing infrastructure and manpower on the four projects over which the Commission has jurisdiction.

Further, our Risk Assessment, Exhibit 1051, included an analysis that the RCFD existing infrastructure is extremely underused and that its current level of staffing has significant capacity available to the very infrequent calls during construction or operation. The Risk Assessment outlined the number and types of calls that the three closest fire stations for the last few years. Specifically,

> Based on a "reasonable standard" for an engine company workload of 6.5 calls per day (or 2,190 calls on an annual basis) as defined in the *Riverside County Fire Department Strategic Plan 2009-2029*, the three fire stations closest to the PSPGS site have the capability of responding to a total of 6,570 calls per year. The total of 665 annual calls between the 3 stations in the year 2012 represents 10% of the maximum workload capacity for these three stations. The total number of calls between the 3

[32] 10/29/13 RT page 252.
[33] Ibid.

> stations is down 75 calls from the 2011 or a reduction in calls of 9%. During this time, the Genesis Solar Energy Project, the Desert Sunlight Project, and the SCE Red Bluff Substation were under construction.
>
> Therefore, based on workload capacity alone, the addition of the PSEGS facility to their service area would not justify the addition of an engine company, a fire station, or any additional staff. [34]

Again, this is not to say that PSH believes RCFD should not be equipped and staffed to respond. However, Staff failed to take into account that existing staffing is capable of responding to the calls that may be necessary during construction and operation of the solar facilities. Further, Staff fails to account for the additional financial support that the non-Commission jurisdictional projects would contribute to Riverside County, which should specifically be applied to RCFD. The Commission ultimately included these factors in the Final Decision on the Rice Solar Energy Project which resulted in significantly less mitigation compensation.

While Staff correctly stated in the FSA that there are few requests for service for both EMS and fire response to solar power plants in Riverside County, and that there is little impact on their overall operation, Staff still concluded that its high mitigation amount was proper and it was proper to allocate all of the regional costs across the four Commission projects identified above. A more accurate and fair approach would be to determine the correct amount that should be allocated to the PSEGS in relation to the other funding recourses Riverside County has available to it, the contribution that should be provided by all projects that would benefit from the RCFD increased infrastructure, and the very low impacts on the RCFD when the existing unused capacity of the existing fire stations is considered.

The Commission should consider the numerous solar projects under development or construction in Riverside County which should proportionally share the burden with the PSEGS. Currently there are eight (8) Riverside Conditional Use Permits (CUP) filed for solar projects, and one county project under construction. The CEC currently has four (4) solar projects, two (2) of which are under consideration and two (2) under consideration. The table attached to The Worker Safety and Fire Protection Testimony of Wesley Alston, (Exhibit 1077) provides an overview of the solar projects currently under consideration in Riverside County and at the CEC, and shows how much revenue is expected to flow to the county.

As summarized in the table attached to the Testimony of Wes Alston (Exhibit 1077) the four (4) CEC solar projects have been earmarked for approximately $2.8 million in one-time costs to the Riverside County fire department and annual payments of $589,000. In addition, the County of Riverside passed Board Policy B-29 in November 2011 and revised the policy in May 2013 requiring that no encroachment permit shall be issued for a

[34] Exhibit 1051, page 7-5.

solar power plant unless the Board first grants a franchise to the solar power plant owner. The B-29 policy, as revised, requires a solar power plant owner to annually pay $150 for each acre of land involved in the power production process. If the eight (8) active CUPs under consideration by Riverside County are approved they would receive $4.2 million annually.

It should also be noted that the Board of Supervisors in June, 2013 passed a spending plan for the money whereby 25% would stay in the area of the solar plants and the other 75% to the remainder of the county for public services, which should be used for EMS and fire response since these solar project do not burden other public services such as sewer, water, and police services. In addition to the B-29 monies, Riverside County is currently receiving $600,000 annually from the Desert Sunlight project under a separate development agreement. It is Riverside County's responsibility to allocate the B-29 monies appropriately. If half of the money Riverside County received for public services under Policy B-29 were to be allocated to the RCFD, it would result in more than $2.5 Million annual revenue without the PSEGS. As noted in Riverside County comments on the PSA, Attachment A, RCFD estimates it needs $1.435 Million annually to support solar development planned within eastern Riverside County. Therefore, if the potentially active projects were to all be approved, RCFD could receive ***in excess of $1 Million annually more than it has estimated is required for it to serve the solar projects***.

Riverside County provided public comment stating that B-29 monies would not be used for fire support. ***The Commission should recognize that there is no other legal reason to collect B-29 monies other than to use it to mitigate impacts***. Otherwise it would be an illegal tax. Riverside County asserts, with no specific analysis of the impacts of the PSEGS on its Fire Department, that it is not required to use money received from other projects to help alleviate its perceived fire deficiencies. If, in fact, RCFD was as understaffed as it would like to Commission to believe, it would direct the B-29 funds to that cause. Instead, RCFD wants the Commission to ignore the facts that their existing infrastructure is underutilized and that Riverside County will be receiving millions of dollars in B-29 funds. PSH should not be penalized if Riverside County chooses not to direct the B-29 funds to the RCFD.

Lastly, Staff ignores any of the real tax revenue that will be generated by construction and operation of the PSEGS. Please refer to the Socioeconomic section of the FSA for an estimate of those taxes.

Given the low impact the PSEGS will have on the fire department's overall operation (a finding that the Commission made for a similar technology in the Rice Solar Energy Project[35]), and given that multiple other solar projects are expected to come online in Riverside County in the near future, projects which will share in ongoing EMS and fire

[35] Rice Solar Energy Project (09-AFC-10).

response use, requiring PSH to pay in more mitigation money for the PSEGS than was required for the Approved Project, which had millions of gallons of flammable fluid in the solar field, is not supported by substantial evidence and is fundamentally unfair.

The Commission heard similar evidence in the Rice Solar Energy Project (RSEP). The RSEP involved a power tower, which like PSEGS did not involve the use of Therminol. In that project, using the same risk matrix that Staff used for the PSEGS amendment and relying on input from the RCFD, Staff proposed a one-time capital payment of $590,000 and an annual payment of $260,000 which would amount to payments totally in excess of $8 Million. After hearing the same evidence about the existing unused capacity of the RCFD, and relying on a Fire Needs and Risk assessment prepared by Wesley Alston following the same protocol Mr. Alston used for analyzing the PSEGS, the Commission concluded:

> We defer to RCFD's determination that drawdown impacts can be mitigated if one or more of these measures is implemented. We also find that the addition of the RSEP within the County *could* contribute to a significant cumulative "drawdown" impact. However, we find that RSEP's cost allocation would require it to implement mitigation ***far in excess of its incremental contribution to the cumulative impacts***. The evidence establishes that 1) drawdown caused by solar thermal plants is unlikely and even less likely to be caused by RSEP given its proposed technology and use of molten salt instead of heat transfer fluid, 3) ***development in the County is not limited to the RSEP and Blythe, Palen, and Genesis solar plants (but these projects are being tasked to bear the full costs of mitigation measures in nearly equal amounts)***, ***and 4) RSEP's anticipated incremental impact has not been quantified***.[36] (emphasis added)

These facts are exactly the same for the PSEGS . Further, the Commission found:

> Moreover, the evidence indicates that the RSEP's incremental contribution to that combined significant cumulative impact would only result if there was a major event at the site. While a major event could occur at any time during the project life, it is more likely to occur during the discrete 4-month salt commissioning phase. Even then, there is little likelihood of such an event.[37]

Ultimately, the Commission required the RSEP to pay its fair share contribution to RCFD of a ***one-time payment of $570,000 in addition to the Riverside County Development Impact Fee.*** For the RSEP it was estimated that the Development Impact Fee (DIF)

[36] Final Decision, RSEP (09-AFC-10), page 9.
[37] Ibid.

would be a one-time payment to Riverside County between $259,310 and $518,620, of which RCFD would receive a one-time payment between $73,070 and $146,140.[38] Therefore, the total compensation package the Commission approved for the RSEP, which is located further away from RCFD facilities than PSEGS, was a one-time value to RCFD of up to $716,140. The RSEP would also have paid annual taxes to Riverside County, but the County could not guarantee that any of the annual taxes paid by RSEP would be directed to RCFD. The compensation package proposed by PSH acknowledges: 1) that the tax revenue for the PSEGS may be slightly lower than that for the RSEP[39]; 2) the DIF does not apply to federal land; and 3) the RSEP was providing an on-site ambulance to reduce the need for RCFD to respond to a medical emergency at the site. The RSEP also was providing its own high angle rescue equipment supplied by the EPC contractor. This is the reason why PSH has proposed to provide the $1.2 Million up front capital for the RCFD to purchase high angle rescue equipment and training. Similar to the RSEP, PSH's proposed compensation package recognizes that there is a greater potential for RCFD to be required to respond during construction of the facility than there is for RCFD to respond during operation of the facility and therefore it incorporates a higher initial annual payment to account for staffing during construction.

PSH respectfully requests that Condition of Certification **Worker Safety 7** be revised to reflect a lower amount to mitigate fire department costs, which we believe is generous. Specifically, PSH has generously offered the following:

1. During construction PSH will fund the cost of a medium rescue vehicle and equipment. The estimated cost of a medium rescue unit fully equipped and training is $1.2 million.

2. During construction PSH would fund one Fire Captain and half the cost of a firefighter to staff the medium rescue unit. Staffing cost of 1 fire captain @ $167.000 X 3 positions = $501,000 and 1/2 firefighter @ $61,000 X 3 positions= $183,000 for total staffing cost of the first 3 years of $684,000 annually.

3. During operation the staffing funded during construction would continue but PSEGS would only contribute 1/8th of the ongoing costs to account for the contribution of the 7 other approved projects even though there are more projects planned that will contribute in accordance with Policy B-29. For operations PSH will contribute 1/8th of $684,000 = $85,500 annually. It is

[38] Exhibit 55, RSEP (09-AF-10). Page 13.

[39] Page 13 of Exhibit 55 estimated the total annual property taxes for the RSEP at $209,000, with only some portion the County could direct to RCFD. As noted on Exhibit 2000, page 4.8-38, Table 14, note 2, the BLM is immune to state or local property taxes. However, the federal government can provide payments to compensate states and local governments for burdens created as a result of immunity (43 U.S.C., § 1701, subd. (a)(13)). An estimated $4.3 million would ordinarily be assessed which the federal government could pay to Riverside County, either in full, in part, or not at all.

important to note that PSH has not relied on projects that are not approved, although there are many planned for the area, in determining its annual contribution.

This offer is significantly greater than the Commission required for the RSEP. Based on the evidence in the record, we request that the Committee find that PSH's proposed offer for RCFD compensation adequate to mitigate any direct or cumulative impact to RCFD. The Committee should reject Staff's mitigation which is greater for the PSEGS than for the original project even though Staff and RCFD agree that the risks of the PSEGS is lower than for the original project. We request Condition of Certification **WORKER SAFETY-7** be modified to incorporate the above-outlined compensation package.

OVERRIDING CONSIDERATIONS

As discussed above, the Commission does not need to make any finding of override for LORS pursuant to Public Resources Code Section 25525 because the PSEGS will comply with all applicable LORS. However, the Commission would need to renew its Findings of Override for CEQA impacts pursuant to Public Resources Code Section 21081 in the areas of cumulative cultural resources and visual resources impacts. Further, Staff found and PSH agrees that the PSEGS land use impacts are fully mitigated and therefore the Commission may delete its listing as an unmitigatable impact from the Final Decision. Staff did find that the PSEGS may have unmitigatable impacts to avian species. PSH provided an analysis in support of the Commission renewing its Findings of Override in Exhibit 1077, Project Description and Overriding Considerations Testimony.

Dated: November 26, 2013

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Scott A Galati
Counsel to Palen Solar Holdings, LLC