

DOCKETED

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Sierra Club Additional Comments

Additional submitted attachment is included below.



July 29, 2014

Re: Docket No. 09-AFC-07C: Palen Solar Power Project – Compliance, Comments of Sierra Club

Dear Commissioners;

Please accept these additional comments on the Petition for Amendment of the December 15, 2010 Commission Decision approving the Application for Certification for the Palen Solar Electric Generating System (PSEGS) on behalf of the Sierra Club. The Sierra Club continues to be extremely concerned about potential impacts to biological resources from PSEGS. We do not believe the Petitioner's phasing approach would mitigate or outweigh these impacts.

The Sierra Club is a national nonprofit organization of approximately 1.3 million members and supporters, over 250,000 of whom live in California. Members of Sierra Club care deeply about the unique wildlife of the California desert, including sensitive avian species. Sierra Club's goals include energy conservation and rapidly increasing our use of renewable energy to reduce climate disruption and displace fossil fuels. We believe energy development can and should occur thoughtfully and sustainably to avoid or minimize harm to sensitive plants and wildlife. In addition to petitioning to intervene in the current proceeding, Sierra Club submitted comments to the Bureau of Land Management (BLM) and the California Energy Commission (CEC) on the original project, the modified project and the proposed amendment.

I. Biological impacts

The Sierra Club continues to be extremely concerned about harm to avian species from the PSEGS technology. The evidence on avian harm from power towers is based on data collected in the very short time since the Ivanpah Solar Electric Generating Station (ISEGS) completed construction. As acknowledged by CEC staff, the much taller towers proposed for Palen would multiply the harm to avian species occurring at ISEGS. Although power tower technology at this scale is still experimental, evidence indicates it could cause population level impacts to protected avian species. As outlined by the United States Fish & Wildlife Service, power towers may not only take birds randomly flying in the area of flux, but may also act as a mega-trap by luring even larger numbers of birds to their demise. Additionally, impacts to invertebrates, especially pollinators, have been largely ignored in this proceeding. Additionally, cumulative impacts to avian species from previously approved power tower projects plus Palen –which is located on the Pacific Flyaway migration corridor---may preclude conservation strategies

necessary for avian species proposed as covered species under the Desert Renewable Energy Conservation Plan (DRECP).

For a number of reasons, we believe the harm from PSEGS would be far greater than currently understood from the ISEGS studies. Given the number of days one or more units were completely offline at ISEGS,¹ the avian mortality at ISEGS may be far greater than currently understood. Flux related injury should be correlated with the actual hours of operation. As CEC staff asserted: *“ISEGS data supports Staff’s long-held position that flux impacts are dependent on flux intensity and length of exposure.”* Hence, the reported flux-related injury and mortality is likely less than would occur if all units of ISEGS were consistently fully operational. This must be taken into account. Additionally, we continue to be very concerned that the study design at ISEGS inadequately captures both the birds maimed or killed which fall onsite and the impairment of breeding or survivorship of injured birds that fly out of close proximity of ISEGS leading to an underestimation of mortality. All of the above deficiencies in the ISEGS studies must be rectified, correlated with actual hours of operation at the various units, and the data be gathered and analyzed over time in order to adequately assess the biological impacts of PSEGS.

II. Lack of overriding considerations

We are concerned by Staff’s retraction of its recommendation against a statement of overriding considerations. The Sierra Club is an active advocate for state and federal policies and incentives to promote energy storage, which is a key feature of a resilient, flexible and carbon-free grid. However, in light of the state policies which will make energy storage a reality in California, together with the huge leaps in storage technology, the specter of adding thermal storage to the project should not rise to the level of an overriding consideration. Thermal storage has already been successfully incorporated in solar thermal projects in and out of state.² Additionally, California’s recent 1.3 GW energy storage mandate will provide numerous opportunities to commercialize storage and bring benefits to California. Further, short term thermal storage provides little if any advantage over a few hours of battery storage, which could readily be added to virtually any solar project, including the no-action alternative or PV alternative.³

Even if a commitment to add long-term storage to the project did justify an override, in this instance the Petitioner has not actually committed to add *any* thermal storage to the project. After entering sworn testimony into the record that adding thermal storage was infeasible and would entail a massive project re-design, the Petitioner has recently presented hypothetical plans for adding a few hours of molten salt

¹ According to the CAISO outage reports, to date for June and July the Ivanpah power plant continued to be plagued by unplanned outages. Every day, the units were operating from 6 to 20 megawatts under nameplate capacity, and one or more units were completely offline on 22 days out of 58. See <http://www.caiso.com/market/Pages/OutageManagement/UnitStatus.aspx>

² The Rice Solar Reserve project in California (approved) and the Abengoa Mojave solar trough with six hours storage in Arizona (operational).

storage to a future unit which it wants “approved now” with the condition that it may seek another amendment in the future to add storage. Additionally, although the Petitioner has repeatedly testified that amending its power purchase agreement (PPA) is infeasible because of the difficulty of obtaining PPA approval by the California Public Utilities Commission, they now ask that the first unit be approved on the chance that a PPA for a second unit with storage could be approved. Essentially, the Petitioner has asked the state of California to gamble with public trust resources in exchange for a technology which can and will be operationalized elsewhere. We do not believe the off-chance of storage at a future unit supersedes the serious potential environmental harm caused by the unit which would be actually installed.

As noted by Staff, the adverse impacts to cultural resources are virtually the same. Regarding biological impacts, one huge bright light could be as potent an attractant to insects (and hence would function as a “mega-trap”) as would two towers; and the visual effect of one large mirror field to avian species would likely continue. However, the renewable energy *benefits* are halved at a single unit, providing even less evidence of overriding considerations.

III. Conclusion

Sierra Club strongly urges the CEC to confirm the Presiding Members Proposed Decision to deny the Petition to Amend. Approving the project at this time, in the face of potentially serious impacts to protected avian species with no proven feasible mitigation, could impair conservation strategies for the DRECP, as well as compliance with the Migratory Bird Treaty Act and the Bald and Golden Eagle Act and well as state laws and regulations. PSEGS provides no public benefit over the approved project, but has greater impacts. In contrast, alternatives, including the original technology/no action alternative, are feasible and would have fewer impacts to avian species, Joshua Tree National Park resources, cultural resources and the public interest overall.

Thank you for the opportunity to submit these comments.

A handwritten signature in cursive script that reads "Sarah K. Friedman".