DOCKETED

Docket Number:	09-AFC-07C
Project Title:	Palen Solar Power Project - Compliance
TN #:	205925
Document Title:	Patrick Donnelly Comment - Response to Applicant's Response
Description:	Response to Applicant's Response to Public Comments on Petition to Extend Deadline for Commencement of Construction
Filer:	Patrick Donnelly
Organization:	Patrick Donnelly
Submitter Role:	Public
Submission Date:	8/29/2015 3:51:08 PM
Docketed Date:	8/31/2015

Patrick Donnelly
PO Box 6, Shoshone, CA 92384
donnellypa@gmail.com | 760.428.8653

August 29, 2015

California Energy Commission Dockets Unit, MS-4
1516 Ninth Street
Sacramento, CA 95814-5512
via electronic submission

Re: Docket No. 09-AFC-7C, Response to Applicant's Response Letter to Comments on Petition for Extension of Deadline for Commencement of Construction for Palen Solar Power Project ("PSPP")

The applicant's response letter of August 28, 2015 is an acknowledgement of reality: a power tower incarnation of PSPP is an entirely different project. Since power towers are so rife with significant impacts to the environment, it is unwise to proceed with attempting to permit one if one's goal is to build a utility-scale solar facility in the California Desert.

However, my earlier comment made no mention of the proposed power tower conversion, and my objections still stand. The project's NEPA analysis is so out of date as to be considered stale. To reinforce this point, I will describe here several ways in which the extant NEPA analysis does not accurately reflect our current knowledge of the impacts of utility-scale solar development in the Chuckwalla Valley, and thus why a fresh NEPA analysis needs to be conducted.

Five years ago, the impacts from the construction of such facilities in the California Desert were only just beginning to reveal themselves. As an example, when the EIS was prepared, little was known about the "lake effect," wherein birds will collide with solar panels thinking that they are actually lakes in the desert. This is acknowledged in C.2-98 in the EIS, which states that "very little research has been conducted on the risks of bird collisions at solar facilities." Since this time, it has become painfully obvious that this is a significant environmental impact which was not adequately addressed in the original NEPA analysis for projects in the Chuckwalla Valley. In particular, the nearby projects of Desert Sunlight Solar Farm ("DSSF") and Genesis Solar Energy Project ("GSEP") have caused numerous avian fatalities due to water-dependent bird collisions (see NextEra DSSF Compliance Documents http://webtest.nexteraenergyresources.com/what/desert-sunlight.shtml and CEC GSEP Compliance Docket # 09-AFC-8C), including most infamously the death of an endangered Yuma clapper rail at DSFF in May of 2013.

The hydrologic implications of utility-scale solar development were also not sufficiently understood five years ago. PSPP proposes to pump 300 acre-feet per year ("afy") for the duration of the project. Outlandish, arm-waving claims are made in the EIS about the aquifers of the northern Colorado and southern Mojave Desert being completely disconnected. These claims are completely unsubstantiated- the aquifers in this part of California are not sufficiently characterized to determine if widespread groundwater pumping for utility-scale solar development in the Chuckwalla Valley Groundwater Basin will have effects radiating outward to other groundwater basins. However, given the remarkable work that has been conducted to characterize the aquifers elsewhere in the Mojave Desert (see the State of the Amargosa Basin Report 2014 (Zdon, 2014) in CEC Docket # 11-AFC-02), it is entirely likely that the groundwater basins could be hydrologically connected. Our knowledge of desert aquifers is still in its infancy, but what has been revealed by the aforementioned work thus far is that there are far more connections than we were ever aware of.

Additionally, the groundwater recharge rates cited in the EIS are completely ludicrous- ranging from 6,300 afy to 31,500 afy. As aquifers are drawing down across the West, the old notion of "recharge=net discharge" is seen for the fallacy it is. These aquifers are remnants from the Pleistocene, when the Mojave and Colorado Deserts were far more mesic landscapes, full of megafauna, trees, and massive inland lakes. Recharge in the hottest parts of the Mojave Desert is likely negligible relative to the overall size of the aquifers, given the extremely high rates of evapotranspiration and pan evaporation. Recent work has also shown that groundwater impacts act in a cascading way. The "mitigation" adopted for PSPP's groundwater withdrawals largely consists of a monitoring network. It is now widely suspected that by the time aquifer drawdown is detected, a cascading chain of events has been kicked off, and simple ceasing groundwater pumping will not stop impacts to phreatophytic vegetation and spring flows.

There are also new cumulative effects to groundwater that CEC needs to concern itself with. The cumulative impacts analysis from five years ago does not reflect planning efforts conducting in the interim period: the PEIS and DRECP both focus development in the Chuckwalla Valley. The cumulative effects to groundwater from solar development resulting from these planning efforts needs to be re-examined to properly assess their impacts.

Lastly, it has become apparent as the facilities have been constructed in the Chuckwalla Valley that the extent of the cultural resources there was woefully understudied during the NEPA processes for these facilities. Human remains were repeatedly unearthed at the GSEP site, resulting in modifications to the footprint of the project. There is currently a lawsuit from the Colorado River Indian Tribes in the courts regarding the impacts of Blythe Solar Power Project to cultural resources. Given the horrific legacy of the American genocide against Native Americans, and repeated encroachment upon sacred and sensitive areas by industrial development, the only moral and ethical way to proceed is to conduct comprehensive site surveys utilizing radar and other technologies to

ensure that cultural resources, and human remains in particular, are not disturbed. This is also required under the Native American Graves Protection and Repatriation Act of 1990.

CEQ's NEPA regulations state in §1502.9(c) that:

> *"Agencies: (1) Shall prepare supplements to either draft or final environmental impact statements if: … (ii) There [is] significant new … information relevant to environmental concerns and bearing on the proposed action and its impacts."*

Given that the "lake effect" was not evaluated in the original NEPA proceedings, it is incumbent upon the CEC to require a new round of NEPA analysis for impacts to wildlife, either through a comprehensive supplemental EIS, or through a new one. Take permits should be required for endangered water birds which may collide with the solar panels. Additionally, given the new information that is being revealed through continuing research into groundwater basins in the desert, a new NEPA analysis of impacts to hydrology is required. This analysis needs to include utilizing isotope analysis to determine water sources, an evapotranspiration study to properly asses groundwater recharge, and a new cumulative impacts analysis. Finally, a comprehensive and complete cultural resources survey and consultation with the affected tribes needs to be conducted, to comply with the law and to respect the sovereignty of neighboring Indian tribes. These are just examples of why there is a distinct need to start a new NEPA proceeding, to comply with CEQ's regulations.

While many in the desert are grateful that we are not facing the prospect of another ecologically disastrous and financially untenable power tower project, the central objections about PSPP remain. The petition for an extension of the deadline for the commencement of construction of PSPP should be denied, and a new proceeding should be initiated if Abengoa unwisely chooses to continue pursuing a solar project in such an inappropriate locale.

Thank you for your consideration,

Patrick Donnelly
Shoshone, CA

The views represented here are my own and in no way reflect the views of any organizations, agencies or persons that I am employed by, contract with, or am otherwise affiliated with.
Vox clamantis in deserto.