

California Native Plant Society

East Bay Chapter

P O Box 5597, Elmwood Station, Berkeley, CA 94705

6/16/11

Dear Alameda County Planners:

The East Bay Chapter of the California Native Plant Society (EBCNPS) appreciates the opportunity to comment on the environmental and public policy issues that need to be considered in solar policies for rural areas of the Alameda County. The California Native Plant Society (CNPS) is a non-profit organization of more than 10,000 laypersons, professional and academic botanists organized into 33 chapters throughout California. The mission of the CNPS is to increase the understanding and appreciation of California's native plants and to preserve them in their natural habitat through scientific activities, education, and conservation.

General Concerns

EBCNPS is concerned that there is currently no plan for a complete public review process regarding the county's solar policy. A policy of this nature will have such broad scope impacts on the County's development in the next several decades that it should be approached in a similar fashion to the creation of a new general plan. In order to ensure an adequate public review process, a full Environmental Impact Report (EIR) needs to be completed in regards to the County's future solar policies. The fact that solar policy is still a relatively new issue for county and city planners makes proper and complete public review even more essential. Any policy that is adopted by Alameda County has the potential to set precedent for projects not just in Alameda County, but throughout California. Incomplete environmental review at such an early stage of the State's solar development process would increase the probability that poorly planned environmentally damaging projects get approved in Alameda County and in other areas of the state. A full EIR would allow public and private stakeholders to continue to have a say in the planning process thus ensuring all environmental issues are addressed as the County works to make its means of power generation more environmentally sound.

EBCNPS reminds the county that any solar development would need to be compatible with existing policies set out in the East County Area Plan (ECAP) and the Williamson Act. Among these policies, policy 71 of ECAP, to "conserve prime soils" and policy 72 of ECAP to "preserve the Mountain House area for intensive agricultural use" are directly applicable. As part of the county's general plan, any policies created regarding solar development need to be integrated into ECAP and subjected to a CEQA review in order to ensure consistency with the rest of the plan. Any development of solar infrastructure on existing high quality farm land will result in migration of farms to areas of lesser agricultural value, thus resulting on greater environmental impact in order to yield the same product quantity. Creating solar policy that corresponds with both ECAP and the Williamson Act will be a vital component of a successful planning process.

Specific Concerns

With an application in for the proposed "Cool Earth" project and a second project (Pegasus), which would dwarf "Cool Earth's" footprint in conceptual stages, several



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specific concerns relating to botanical resources become apparent. Both of these solar development projects are planning construction in the Mountain House area of the county. While some of the land being planned for solar development is disturbed-irrigated land being used for intensive agriculture, there are sensitive native plant communities present in this region. The Mountain House area falls within one of EBCNPS's 15 Botanical Priority Protection Areas (BPPA) for Alameda and Contra Costa Counties. This region, known as the Altamont BPPA, has been designated by EBCNPS as an area for priority protection due to its unique natural communities such as Northern Claypan Vernal Pools, Alkaline Grassland, and Valley Sink Scrub. Any development for solar infrastructure needs to consider sensitive and unique natural resources such as those mentioned above and make it a priority to avoid impacts to them during the planning phases of each project. EBCNPS recommends focused botanical surveys be carried out at locations being considered for development and at locations that may provide development opportunities in the future. The results of these surveys would help the planning department better prioritize areas for solar development based on minimizing environmental impacts, thus simplifying the overall planning process.

EBCNPS looks forward to continuing to follow this issue and will have a representative at the June 16, 2011 community meeting to make further comments on this subject. If you have any questions, please feel free to call me at 510-734-0335 or email me at conservation@ebcnps.org.

Sincerely,

Mack Casterman
Conservation Analyst
East Bay Chapter of the California Native Plant Society



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**COMMENTS FOR ALAMEDA COUNTY PUBLIC HEARING ON SOLAR
POLICY
JUNE 23, 2011**

We would like to begin our comments this evening by providing a little background on our company and our perspective on the need for renewable energy. In this room I see that there are a number of different people representing various environmental groups. I would count Cool Earth Solar among them. Cool Earth Solar was founded by people who share a common vision to protect the planet. Our mission has been to find solutions to our nation's (and the world's) energy, water, land, and sustainability challenges. We see ourselves as environmentalists with a goal of creating a sustainable clean energy solution.

With this background and shared vision in mind, I would like to offer the following points.

First, we live in world with pressing and urgent environmental problems. Last month a report was delivered to Congress from the [National Research Council](#), an arm of the National Academy of Sciences, on the need for a strong national policy to limit emissions of heat-trapping gases. The report concluded: *"Not only is [global warming](#) real, but the effects are already becoming serious and the need has become "pressing" for a strong national policy to limit emissions of heat-trapping gases.... 'The risks associated with doing business as usual are a much greater concern than the risks associated with engaging in ambitious but measured response efforts,' the report concludes. 'This is because many aspects of an "overly ambitious" policy response could be reversed or otherwise addressed, if needed, through subsequent policy change, whereas adverse changes in the climate system are much more difficult (indeed, on the time scale of our lifetimes, may be impossible) to "undo.'" Source: <http://www.nytimes.com/2011/05/13/science/earth/13climate.html? r=1>*

Existing legislation

Let me state a few facts about existing legislation:

In March, the Department Of Conservation, Division of Land Resource Protection, issued a white paper titled "Solar Power and the Williamson Act". In it, the Department made clear that Williamson Act contracts should not stand in the way of the development of solar projects on land under these contracts. The Department recognizes the importance of the development of solar energy and supports measures to allow for it to be developed on land currently under these contracts. Source: <http://www.conservation.ca.gov/dlrp/lca/Documents/DOCSolarWhitePaper%203%2011%2011.pdf>

At the last meeting there were some questions raised about whether solar was consistent with Measure D. The County has already determined that solar, like

wind, is compatible with Measure D.

Additionally, this past year the California Legislature voted into law a 33% Renewable Portfolio standard -- meaning that by 2020, 33% of our electricity must be generated from renewable energy sources. It's useful to consider why this legislation was put in place. Among the many reasons was the desire to reduce pollution and greenhouse gas emissions, as well as to find a more sustainable source of energy generation. With this law enacted, both the California Public Utilities Commission (CPUC) and the California Energy Commission (CEC) are charged with issuing the regulatory framework and rules to implement this critical legislation to expand the development and deployment of renewable energy. There have been numerous public proceedings at the State level regarding renewable resources and their regulation, including what technologies qualify as "eligible renewable resources". The CPUC and CEC have concluded that large scale, ground-mounted solar is an eligible resource consistent with the law.

The RPS mandate is a state legislative and regulatory issue, and not a county issue. Lead agencies, like the County, are responsible for complying with CEQA, which covers impacts to biological resources, plant life, water, air, noise, traffic, visual, and a host of other topics. We would suggest that a solar policy can fill the gap between these two by encouraging best practices for deploying solar.

We would offer the following recommendations for the policy:

- First, we suggest the County consider having someone on staff who can help advise solar companies on best practices rather than codifying a one-size-fits-all list of requirements that discourage solar projects.
- Additionally, the County might set up a website and invite interested parties and organizations to provide links to pertinent information and resources such as maps and information on best practices, case studies, white papers, etc.
- The County might also consider nominating projects that implement best practices for awards (e.g. most eco-friendly rural solar project)
- The County could streamline the permitting process for solar projects.
- The County could offer additional incentive for projects with preferred characteristics such as
 - tax credits
 - lower fees
 - even shorter forms for most preferred applications
- If solar is for a building, then additionally provide similar incentives, education, and encouragement for energy efficiency measures

We've researched what is considered "solar best practice". We'd like to share some of what we found.

- The first is from a paper produced by a group called Defenders of Wildlife. The paper is titled "Making Renewable Energy Wildlife Friendly":

- The report begins by talking about the critical need to quickly develop renewable energy and recognizes that centralized solar is needed to accomplish this: *“To meet the ambitious goals set by 33 states and contemplated by the Obama administration and many key Congressional leaders, greenhouse gas pollution must be reduced and the percentage of our energy needs that comes from renewable sources must increase. This can be achieved, in part, through improved energy efficiency and conservation and through the use of “distributed energy systems” such as rooftop solar. But to reach our ambitious goals in a timely manner, we will also have to make a commitment to some utility-scale development of solar, wind and geothermal energy.”*
- The report goes on to detail best practices for development of centralized renewable energy projects. Among those recommendations is to prioritize using land that has already been disturbed: *“**Land that has already been disturbed should be preferred for development.** Whether in private or public ownership, land that has been developed for industrial, agricultural or other intensive human uses is generally superior to “Greenfield” sites in terms of reduction of environmental degradation.”*
- The report also highlights a solar energy project being developed by Solana as a good example of utility-scale solar development: *“Once an alfalfa farm, the project site is almost ideal for a utility-scale solar power plant. Located just 70 miles away from Arizona’s largest city, Phoenix, it’s close to a major highway, easily accessible roads and existing energy infrastructure. And because alfalfa farming in the arid region required vast amounts of water, the Solana project will draw around 75 percent less groundwater than past agriculture.”* So what made this project site attractive to them is (1) its proximity to load, (2) utility and transportation infrastructure was already in place, (3) the site was already disturbed, and (4) the new project would reduce water use.

source:

http://www.defenders.org/resources/publications/programs_and_policy/renewable_energy/making_renewable_energy_wildlife_friendly.pdf

- I read an article in which David Yarnold, the President and CEO of the Audubon Society came up with the idea of installing solar panels in a 13,000 acre wildlife sanctuary. The article goes on to explain:
 - “Fossil fuels are one of the number one causes of environmental problems that affect the wildlife the Audubon Society is trying to protect, making the choice of a wildlife preserve a logical place for a solar array and Audubon itself a powerful partner in the push for more renewable energy.” Source: <http://www.bellaenergy.com/2011/02/audubon-society-unveils-solar-array-at-corkscrew-swamp-sanctuary/>

- “Community Power - Decentralized Renewable Energy in California”
 - This paper recognizes that generators of 20 MW or smaller, on previously disturbed land, close to load and infrastructure is considered distributed generation - they advocate for this type of use. The author, a member of the Sierra Club California Energy-Climate Committee and the Bay Area’s Local Clean Energy Alliance, confirmed this during a phone discussion on June 17th, 2011.
- Sierra Club:
 - Sierra Club national policy on Solar Energy
 - The Sierra Club believes that solar energy can become an important source of power for our society. The Club supports federal, state, and local incentives for the commercial production and installation of small-scale residential and industrial solar collection systems, where the technology is already proven. The use of solar heating and cooling systems in new government buildings is encouraged by the Club whenever possible.
 - The Club supports increased federal and state funding for research, development, and demonstration in solar energy applications, with emphasis placed on the development and deployment of decentralized systems for both heating and cooling and for generation of electrical power.
 - The Sierra Club supports the construction and testing of a limited number of demonstration central station solar-electric power plants, providing that during the demonstration phase, the environmental, social, and economic impacts are completely evaluated and publicly presented by an independent body of panel not directly associated with the building of these plants. [\[Cool Earth Solar note: we believe that CEQA for both permitting and ongoing requirements fulfills this provision\]](#)
 - The Sierra Club acknowledges the probable benefits of central station solar power plants over conventional nuclear or fossil-fuel plants. These benefits include minimal air pollution, a minimal transportation support network, the elimination of hazardous chemical or radioactive wastes, and the elimination of mining. While recognizing that a solar-electric power plant may use as little as 30% of the land used by an equivalent fossil-fuel or nuclear plant when mining lands are included, the Club is nevertheless concerned about the widespread and indiscriminate deployment of large-scale solar power systems because of the potential for requiring large areas of presently undeveloped land and for facilitating the continuing and escalating waste of energy in this country. [\[Cool Earth Solar](#)

note: we support energy efficiency and conservation from both a policy and technology stand point. We also believe that the CEQA process for permitting sites prevents indiscriminate deployment. We would also point out that the Clean Energy Alliance considers generation at sizes 20 MW and below, close to load and on previously disturbed land - as distributed generation]

- excerpted from:
<http://www.sierraclub.org/policy/conservation/energycons.aspx>
- Discussions with senior staff of the Sierra Club SF Bay Chapter says that Sierra Club is officially neutral on ground mounted solar. Many believe that preventing mountain top removal, natural gas hydrofracture, and slowing and reversing the green house gas build up is top priority.
- Discussions with a member of the California Sierra Club's Energy Committee confirmed that solar, sited close to load, near existing infrastructure, and on previously disturbed land, is consistent with Sierra Club's goals and views on best practices for solar development.
- Summary of Best practices:
 - Previously disturbed land
 - close to load
 - near existing infrastructure
 - designed for easy removal

What about rooftop solar?

In these workshops we have heard some attendees asking if we can meet all of our need for renewable energy with solar installed on rooftops and parking lots. As we have previously pointed out, solar installed on rooftops and parking lots is insufficient to meet our aggressive goals for renewable energy generation. While we agree that rooftops and parking lots are excellent places to put solar panels, a portfolio approach is needed, which allows for both ground-mounted utility scale solar plants as well as rooftop projects. Below, we offer a few more data points to consider on the subject:

- Even seemingly benign solar projects on parking lots can face resistance. A solar project to be built over a parking lot in San Luis Obispo County was voted down 8-to-1 citing "visual blight" as one of the problems: "A community advisory board in the small coastal town of Los Osos voted 8 to 1 to oppose the panels on parking lots at a local middle and elementary school, with one panel member warning of "visual blight." Source:
<https://www.nytimes.com/2010/11/26/science/earth/26parking.html>
- There have been a lot of questions raised about scale and whether it's possible to address our entire need for renewable energy solely from parking lots and rooftops. I'd like to draw everyone's attention

to what has been accomplished on rooftops to date. First, consider that over the last decade solar panels have been installed at 75 school campuses (elementary to college) in PG&E territory. Their total (cumulative) installed capacity is 20 MW, or about twice the size of our proposed project. Put another way, our single project is half the size of all the solar installed on all the schools in northern California over the last decade. Source:

<https://www.nytimes.com/2010/11/26/science/earth/26parking.html>

- Next, let's look at the California Solar Initiative (for net-metered commercial and residential solar projects), which has been operating for six years now. Under this aggressive program to stimulate the growth of solar on rooftops, a total of 553 MW of solar has been installed. To put that in perspective, there are five natural gas power plant projects currently under development in Alameda and Contra Costa County, with the smallest one being 200 MW and the largest being 930 MW. Together, they total 2,904 MW or more than 5 times the total size of all the commercial and residential solar installed in the last 6 years. If we want to prevent these plants from being built, we need to get serious and move with greater speed and scale. Source for CSI data:

<http://www.californiasolarstatistics.ca.gov/> (553 MW number was arrived at by downloading program data and filtering for only projects that had been installed)

- **Contra Costa County:**

1. [Oakley Generating Station \(Oakley\) - 624 MW](#)
2. [Willow Pass \(Pittsburg\) - 550 MW](#)
3. [March Landing \(Antioch\) - 930 MW](#) - the developer is Mirant. Their AFC was approved by the CEC in August 2010

- **Alameda:**

1. [Mariposa Energy Center \(Byron\) - 200 MW](#)
2. [Russell City \(Hayward\) - 600 MW](#) - Already got its license from the CEC but has yet to be constructed, I believe. It's a JV between Bechtel and Calpine.

- Some in these workshops have suggested that they might have read something about California's use of electricity going down. This is not the case. While it is true that California has been a national leader in roughly maintaining the per person use of electricity, the overall energy use of the state has grown significantly to match the growth in population. To meet much of this increased demand, California has turned to importing 34% (2008) of its electricity. This makes the state the largest net importer of electricity in the United States. Importing all this electricity means that the energy must travel along long transmission corridors. This reduces efficiency, increases costs, and could eventually force the creation of expanded transmission

infrastructure. It also means that we export many of the environmental choices of what are best sources and best practices for energy generation to our neighbors. And just because a fossil fuel power plant is built outside California state lines, it does not mean that the pollution with accompanying health and ecological risks stay outside these lines on a map.

Sources: <http://www.eia.gov/state/state-energy-profiles.cfm?sid=CA> ,
[http://energyalmanac.ca.gov/electricity/ELECTRICITY GEN 1997-2010.XLS](http://energyalmanac.ca.gov/electricity/ELECTRICITY_GEN_1997-2010.XLS)

- “County could create a fund and ask non-profits, federal, and state governments, and foundations to donate matching contributions
- County could create a one-page, over-the-counter permit for all solar... or just preferred sites -- like what Germany has done

Tri-Valley Conservancy

PRESERVING LAND FOR FUTURE GENERATIONS

August 9, 2011

Ms. Elizabeth McElligott
Alameda County Planning
224 W. Winton Avenue, Rm 111
Hayward, CA 94544

Re: *Planned Solar Policies for Alameda County*

Dear Ms. McElligott:

On behalf of the Tri-Valley Conservancy ("TVC"), I am writing in response to Alameda County's development of policies related to the permitting of solar plants in the rural areas of the County.

TVC's mission is to protect agriculture, plant and animal habitat, and scenic lands, while promoting opportunities for public recreation and wildlife protection. Since our founding 16 years ago, we have protected more than 4,200 acres of agricultural and open space land together with 6.5 miles of hiking and walking trails.

One of the biggest questions for the county when it comes to the solar facilities is not whether they should be constructed, but rather their impact. The East Alameda County's fertile farmlands, scenic open space and plant and animal habitats are irreplaceable. They are a heritage that our community should protect.

The County should do as much as it can to prepare itself for future applicants. The exact impact these giant power plants will have in the immediate surrounding environment has not been determined. A whole ecosystem in the county cannot be destroyed by solar panels. Doing so would push back decades of conservation efforts already made by Measure D, ECAP, EACCS, SLVAP to name a few.

The past three years Alameda County, along with multiple agencies, completed the East Alameda County Conservation Strategy. This strategy identifies that there are Sensitive Vegetation Communities, Habitat for Special-Status Plant and Wildlife Groups and CNDDDB Occurrences of Special Status Plants and Wildlife within the East Alameda County.

TVC attended both workshops/meetings hosted by Alameda County Planning and also reviewed California's Renewables Portfolio Standard ("RPS") target of 33% by 2020. TVC further appreciates that California law has certain provisions limiting a public agency's ability to regulate the installation of solar facilities.

Tri-Valley Conservancy



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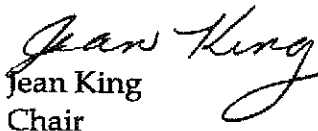
www.trivalleyconservancy.org

TVC is concerned that large-scale solar installations may damage the surrounding environment and change the landscape of a community. Thus, TVC recommends that Alameda County consider the following in drafting policies or ordinances related to solar power plants:

1. The term "solar farm" should be avoided as it is misleading. Instead, the term "solar power plant" should be used as an accurate description of the use proposed.
2. The permitting for solar power plants (as opposed to systems of limited size installed by landowners to power their own operations) should be reviewed on a case-by-case basis and include public input and hearings normally expected of a proposal for such a substantial change in land use, including a full environmental assessment.
3. Applicants should be required to remove and dispose of all equipment and fully restore any agricultural site to its pre-power plant natural condition, which should be in the form of a sufficient bond with escalators for inflation prior to commencing construction of the power plant. This is similar to new requirements being imposed on the windmill operators. Otherwise, inevitably abandoned equipment and other solar improvements will revert to public expense for expensive future removal, cleanup and remediation.
4. No solar power plants should be permitted within the reasonably proximate view shed of areas dependence on rural "feel" and bucolic view shed, including the Tri-Valley wine tourism areas, SLVAP area, present or future residentially proximate areas, and other similar locations.
5. To the extent possible, any agricultural land forfeited to a solar power plant should be mitigated through acquisition by the power plant developer of a permanent offsite agricultural easement. This is in addition to any environmental mitigation required.
6. Solar power plants should be located close to transmission substations, so that power lines will not impact scenic corridors.

Alameda County must appropriately address the regional impact that large solar power plants may have on our environment. Solar power plants may solve one problem, but may create many others. As such, we must learn to conserve our land and develop it properly for green energy.

Sincerely,


Jean King
Chair

CC: Alameda County, Supervisor, Scott Haggerty

Alameda County, Community Development Director, Chris Bazar

Alameda County, Office of the County Counsel, Richard Karlsson

Alameda County, Planning Director, Albert Lopez

City of Livermore, Steve Stewart

Alameda County Resources Conservation District, Executive Officer, Kent Reeves

Greenbelt Alliance, Senior Field Representative, Matt Vander Sluis

Sierra Club, Conservation Chair, Dick Schneider

SOLAR POLICIES FOR RURAL AREAS OF THE COUNTY

COMMENTS FROM LIVERMORE AREA RECREATION AND PARK DISTRICT (LARPD)

elizabeth.mcelligott@acgov.org

Timothy Barry, General Manager: My comments would be that LARPD is not in favor of the use of public park lands, such as Sycamore Grove and Brushy Peak, for the installation of solar panels that generate solar energy. Such an installation would likely destroy environmental elements such as plants and animal habitat as well as would likely harm the aesthetic values of the parkland, which are designed for the enjoyment of park users who pay for the creation and maintenance of the park through their property taxes.

Bruce Aizawa, Parks and Facilities Manager: Depending on the size of the unit could they be used in parking lot areas for shade structures as well as supports for solar cells?