MEMORANDUM

TO:        Board of Supervisors’ Transportation/Planning Committee

FROM:      Chris Bazar, Director, Community Development Agency
           Albert Lopez, Planning Director

DATE:      October 3, 2011

SUBJECT:   Proposed Policies for the Development of Solar Energy Facilities in Rural Alameda County

BACKGROUND

Earlier this year, the Board of Supervisors heard a report from staff on the need for policies to address issues concerning the development of Solar Energy Facilities (SEFs) in the County. Since interest from commercial entities has thus far been focused on locating SEFs in the rural areas of East County, the Board directed staff to develop policies for determining appropriate locations in rural areas for large-scale photovoltaic facilities that generate electricity primarily for off-site use. The attached paper summarizes existing county policies that are relevant to solar developments, identifies issue areas where existing county policies could be expanded, and outlines potential alternatives for developing additional policies. The paper was originally scheduled to be presented to the Board of Supervisors on September 13, but the item was continued to allow additional time for consideration of the issues. Two issues of particular concern that were raised just prior to the September 13th meeting are discussed below.

Although, as noted above, this paper focuses on the rural County, staff recognizes that it is the Board’s intent to promote the development of solar facilities in urban unincorporated areas as well; indeed, efforts are already underway to promote the installation of solar panels in the urban unincorporated area. For example, the recently-adopted Community Climate Action Plan includes measures to promote solar development in urban areas, and CDA’s Neighborhood Preservation and Sustainability Department is in the process of implementing programs to provide financial assistance to homeowners who are interested in installing solar panels. Once the policies for rural areas are completed, staff will undertake a more intensive process to develop and implement policies and programs to encourage the development of solar facilities in the urban area.
DISCUSSION

Solar Energy Facilities on Land under Williamson Act Contract

The County’s Williamson Act Uniform Rules and Procedures are undergoing a comprehensive revision at this time; and the draft rules are also before the Transportation and Planning Committee for consideration. Solar panels are considered a compatible use under draft Uniform Rule 2, Section II.E.3. However, under the draft rules in their present form, coverage of the parcel with panels is limited to 10% or 10 acres, whichever is less; any solar facility that would cover a larger area would require cancellation of the contract. This is an approach that was explicitly endorsed by the County’s Agricultural Advisory Committee, although other members of the public have suggested that this size restriction be changed to allow larger solar facilities on property under contract. A detailed discussion of this issue and a potential revision to Uniform Rule 2 to address some of the aforementioned concerns are contained in the separate memo for the Williamson Act (also under consideration today by your Committee).

Potential Impacts to Raptors of Locating SEFs near Windfarms

Representatives of environmental groups have suggested that locating SEFs in the Mountain House area, in close proximity to the existing windfarms in the Altamont Pass, may increase avian mortality in the Wind Resource Area by displacing raptors that would otherwise forage on the SEF sites and driving them toward the wind turbines. As the siting of SEFs near wind turbines is a unique situation, it is difficult to predict what the impacts might be.

As you know, Alameda County recognized the windfarms’ impacts on avian wildlife many years ago, and consequently established entities such as the Altamont Pass Wind Resource Area (APWRA) Scientific Review Committee (SRC) and the Avian Wildlife Protection Program. This program and process were established to balance wildlife protection while maintaining the efficient production of renewable energy, and is ongoing until all old-generation turbines are removed or repowered. In addition, the County has initiated the APWRA Repowering Programmatic Environmental Impact Report (PEIR) and anticipates its completion in the first half of 2012. It will address all potential avian mortality concerns -- including the solar-related concerns raised noted above -- in the Altamont through the cumulative impact analysis and Avian and Bat Protection Program (ABPP). The ABPP will be reviewed by the SRC and will be discussed at public meetings.

NEXT STEPS

The solar policy paper is scheduled to be presented to the full Board of Supervisors for consideration at the October 11 Board Planning meeting.

ATTACHMENTS

- Letter from Alameda Creek Alliance, September 13, 2011
- Letter from the East Bay Chapter of the California Native Plant Society, September 13, 2011
- Statements of new Solar Coalition regarding Alameda County Solar Policy
Alameda County Board of Supervisors
County Administration Building
1221 Oak Street, Fifth Floor
Oakland, CA 94612

Re: Solar Development in Alameda County

Thank you for the opportunity to provide our views on proposed industrial solar energy facilities in eastern Alameda County.

The Alameda Creek Alliance is a community watershed group with more than 1,900 members, dedicated to the protection and restoration of the natural ecosystems of the Alameda Creek watershed. Many of the areas in eastern Alameda County being considered for industrial solar development are within the Alameda Creek watershed.

We have concerns about the impacts of industrial energy facilities on habitat for endangered, threatened and rare species in eastern Alameda County, the cumulative effects of large-scale solar development combined with ongoing severe impacts to raptors from wind turbines at Altamont Pass Wind Resource Area. We urge a proper level of environmental review for proposed large-scale solar facilities. We are concerned about conflicts with the East County Area Plan and Measure D.

We appreciate the County’s efforts to define county policies for the appropriate development of solar energy facilities. As a conservation group, we strongly support the development of non-petroleum energy sources, as long as they are sensibly and appropriately sited. However, we are adamantly opposed to any energy development, solar or otherwise, that results in the unnecessary loss of open space and wildlife habitat.

Alameda County should focus on distributive rather than industrial-scale solar energy developments. Alameda County has not done enough to encourage rooftop solar. Development and zoning laws should be amended to require solar arrays on all new buildings. The county should pass policies and provide incentives that cover every roof-top in the county with solar panels. Then, if large-scale solar farms are still needed to meet renewable energy goals, they should be sited exclusively on disturbed lands, not on agricultural lands or areas with habitat value for wildlife.

We encourage the county to adopt policies and amend the county general plan to prevent siting of any industrial solar energy facilities within suitable habitat for federally or state protected endangered or threatened species, breeding or foraging habitat for sensitive raptor species, or adjacent to the Altamont Pass Wind Resource Area, for the reasons outlined below.
The photograph below is of a recent rooftop solar installation at Crescent Park in Richmond, California, in adjacent Contra Costa County. This solar array is the largest affordable housing solar installation in the country and provides 900 kW of power, meeting approximately 20% of the City of Richmond's renewable energy goals.

In 2016, EAH Housing began planning an energy retrofit for its Crescent Park development in Richmond, Calif. The $50 million renovation includes a 900-kilowatt photovoltaic system believed to be the world's largest affordable-housing solar installation.

This is an example of how to sustainably create green jobs and green energy on existing infrastructure, without destroying or degrading wildlife habitat and agricultural lands. Alameda County should promote and explore solar developments similar to Crescent Park before allowing or encouraging industrial energy facilities on rural land. Why would Alameda County promote the loss of open space and wildlife habitat for solar energy when there are so many rooftops and parking lots available for solar?

The areas within eastern Alameda County being considered for industrial solar development contain essential habitat for numerous endangered and threatened species, such as the California red-legged frog, California tiger salamander, San Joaquin kit fox and Alameda whipsnake. In addition, grasslands in eastern Alameda County provide important breeding and foraging habitat for many raptor species of concern, such as golden eagles, western burrowing owls, Swainson’s hawks, red-tailed hawks and American kestrels. There is no reason to sacrifice habitat for our wildlife when more than enough other areas with no habitat value for native wildlife are available, such as rooftops and parking lots.

Furthermore, we question whether Alameda County has learned any lessons from the ongoing
bird kill fiasco at the Altamont Pass Wind Resource Area, where thousands of raptors continue to be killed each year because of the County’s failure to consider impacts to wildlife when approving and permitting the industrial wind farms, and failure to require energy companies to take adequate measures to reduce the massive bird kills, or even to enforce the minimal measures the County has required of energy companies. Siting industrial solar facilities adjacent to Altamont Pass could compound the bird kill problems by displacing and dispersing breeding and foraging birds from grasslands and agricultural lands, driving even more birds into the wind turbines.

Any increase in avian mortality will make it even more difficult for the County to reach its mortality reduction goals for the Wind Resource Area, which are already not being met. Any county solar policy must consider the impacts on rare and endangered species, cumulative effects and potential for increased raptor deaths, and the integrity of wildlife migratory corridors.

We note that Alameda County has issued a notice of intent to adopt a Mitigated Negative Declaration for the 140-acre Cool Earth Solar facility (CUP PLN 2011-00009) in eastern Alameda County. Use of a Mitigated Negative Declaration for this project is completely inappropriate, and an Environmental Impact Report must be prepared and the cumulative impacts of multiple industrial solar facilities must be evaluated for any project approval to comply with the California Environmental Quality Act. Furthermore, it is inappropriate for Alameda County to approve industrial-sized solar facilities without first defining and adopting a County policy on solar energy development, amending the County Plan and zoning ordinances to reflect this policy, and preparing a programmatic Environmental Impact Report for all of the County lands being considered for industrial energy development, solar or otherwise.

Finally, we have concerns that the proposed policies and findings by the Alameda County Planning Department are incompatible with the East County Area Plan, specifically protection of biological resources and valuable agricultural lands. The Planning Department’s proposed policies would also violate Measure D - it was not the intent of Measure D to allow industrial facilities.

We urge the Board of Supervisors to pursue a sensible solar energy development policy that prioritizes rooftop and parking lot solar in urban areas over rural industrial development.

Sincerely,

[Signature]

Jeff Miller
Executive Director
Ms. Elizabeth McElligott  
Alameda County Community Development Agency  
224 West Winton Avenue, Room 111  
Hayward, CA  94544  

Re: Proposed Solar Policies for Rural Alameda County

Dear Ms. McElligott:

The East Bay Chapter of the California Native Plant Society (EBCNPS) appreciates the opportunity to comment on the County’s “Proposed Policies for Solar Energy Facilities in Rural Alameda County” document (Proposed Policies Document).

The California Native Plant Society is a statewide non-profit conservation organization. CNPS works to protect California’s native plant heritage and preserve it for future generations. Our members include both professional and lay botanists and the interested public. We promote native plant appreciation, research, education, and conservation through our 5 statewide programs and 33 regional chapters in California. The East Bay Chapter (EBCNPS) covers Alameda and Contra Costa Counties and its membership totals over 1000 members, many of whom live in Alameda County.

**GENERAL CONSIDERATIONS**

Since our original letter on June 16th, the County has produced the current document detailing the proposed policies for solar energy facilities in rural areas of the County. This document notes EBCNPS’s earlier comments as an attachment and our suggestions are reflected in some sections. We are pleased to see that any amendments to the County’s general plan and land use ordinances as part of this new policy will be accompanied by public hearings and California Environmental Quality Act (CEQA) analysis. However, we are concerned that the majority of the document remains very general and avoids specific descriptions of what would be involved in the respective review and permitting processes of different Solar Energy Facilities (SEFs). For example, the document does not specify whether there would be a CEQA analysis with public review on a project by project level. What would be the depth of analysis of environmental impacts/CEQA review depending on the type of permit required by the County (i.e. could a project be given a MND and approved by the Planning Director or BZA without public review)? This question is in relation to the tables on page 8 and 9 of the Proposed Policies Document.
EBCNPS reminds the County that the purposes of Measure D are to preserve and enhance agriculture and agricultural lands, and to protect the natural qualities, wildlife habitats, the watersheds and the beautiful open space of Alameda County from excessive, badly located and harmful development. Despite the current efforts of Alameda County to amend the County’s General Plan and Zoning Ordinance to allow large-scale solar, these efforts are inconsistent with the will of the voters and their approval of Measure D and its stated purpose.

SPECIFIC CONSIDERATIONS

Questions Related to Proposed Policies Document’s Description of Required CEQA Analysis:

- Are we to assume that the public process/public hearings that have already taken place, on May 24, June 16, and June 25, fulfill the public hearings mentioned above?
- Was the meeting on May 24, which convened the County Agricultural Advisory Committee, intended to fulfill the East County Area Plan’s requirement to convene an advisory panel of experts (ECAP Section 18) to make recommendations on economic viability of agriculture and ranching and new County Policies?

Biological Resources:
We are disappointed to see that our information regarding rare plant habitat in the Mountain House area of the County was not included in the Proposed Policies Document. We again remind the County that 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 Proposed Policies Document refers to Policy 123 of ECAP which refers to mitigation of biological resources/lands. It is important to note that the ECAP area includes thousands of acres of alkaline supported habitats. Alkaline habitats are site specific and influenced by specific environmental factors, both biotic and abiotic, that cannot be recreated. Therefore alkaline habitats are unmitigable leaving preservation the only viable option.
The Proposed Policies Document states that site specific biological surveys are to be conducted to determine appropriate biological mitigation for each proposed project. However the IS/MND for the Altamont Solar Energy Center Project states that only one site visit, in February 22, was conducted. A single visit during the height of winter is not acceptable for determining habitat suitability, let alone presence or absence, of special-status plant species. Surveys such as this should not be considered acceptable for a CEQA document or proposed policy change as is being proposed by the Proposed Policies Document.
We recommend that unique natural communities such as Northern Claypan Vernal Pools, Alkaline Grassland, and Valley Sink Scrub present in the Mountain House area of the County be mentioned for avoidance as part of the Proposed Policies Document. We also recommend preemptive biological surveys be carried out in potential areas for future SEFs so that these areas may be prioritized for solar development based on minimizing environmental impacts, thus simplifying the overall planning process.
Questions and Comments Regarding Proposed Policies:

- Proposed policy #1 – Restoration of Ag Land after Closure of Solar Energy Facilities (SEF)
  - What assurances do we have that lands where SEFs use has been discontinued would be restored to its pre-SEF agricultural productivity? We have concerns that after SEFs are abandoned/closed these lands would be targeted for commercial and real estate development.
  - How can the County prove the feasibility of restoration activities that would result in agricultural land productivity similar to pre-SEF levels?
  - Has the County considered all types of SEFs including but not limited to photovoltaic installations?
  - If revegetation of disturbed areas that will not be used for cultivated/intensive agriculture is to occur, locally native seed mixes and plants species shall be used.

- Proposed policy #2 – Preservation of Productive Ag Soils
  - We strongly suggest the County produce visual maps for the purpose of educating the public about the current location and acreage of soils fitting the description of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance before moving forward. A large proportion of these types of soils occurring within the County are located within the Mountain House area.
  - If approved, these large-scale solar facilities would have the potential to remove these areas/soil types from being classified as Prime, Unique or Statewide important. The lack of this type of intensive agriculture and important soils in the County could put pressure on other areas, such as North Livermore Valley, to irrigate Class I and Class II type soils that are currently used in dry land farming operations. There is already discussion about bringing irrigated agriculture to North Livermore Valley. We strongly disapprove of the proposals to irrigate North Livermore Valley for intensive agricultural use due to the sensitive Springtown Alkali Sink ecosystem, another Botanical Priority Protection Area within Alameda County. If approved, SEFs in the Mountain House area could put pressure on moving forward with irrigating North Livermore Valley which has the potential to completely alter the hydrology that the Springtown Alkali Sink ecosystem and the plant inhabitants that depend on it (This comment is also applicable to Proposed policy # 3 – Local Host Impact Fee/Development Agreement).

- Proposed Policy #4 – Limitation for SEFs in South Livermore Valley Area Plan
  - We strongly urge the County to recognize the delicate Springtown Alkali Sink ecosystem in North Livermore Valley and provide assurances for its protection should SEFs become a reality in the ECAP area. We recognize that if these policies are ultimately adopted, the possibility of SEFs in North Livermore Valley are a reality. To prevent significant alteration of
the delicate hydrology associated with the Springtown Alkali Sink ecosystem, we urge the County to limit SEFs in North Livermore Valley to building mounted structures or ground mounted facilities over existing impervious surfaces within the designated building envelope as proposed for the South Livermore Valley.

- Additionally if SEFs are ultimately approved for the ECAP area, we also request a 20-year moratorium on further irrigated/intensive agriculture (beyond what currently exists) in North Livermore Valley and its contributing watershed.

Recommendation for Use of Local Ecotypes During Implementation of ECAP Policy 114:
ECAP Policy 114, mentioned on pg. 6 of the document should be applied with the requirement that local ecotypes of native plants be used when possible to “enhance scenic quality” of SEF areas and to “screen undesirable views”. If ornamental plants are used, language should be added to the document to ensure that they are not invasive.

Need to Postpone Consideration of Pending Solar Projects Until Complete Policy Has Been Reviewed and Approved:
The cover letter to the Proposed Policies Document mentions that the policy recommendations in this document “can serve as guidance in the consideration of pending applications in advance of the adoption of the proposed general plan and proposed zoning ordinance amendments.” (pg. 2 of Chris Bazar letter) EBCNPS disagrees with this statement and argues that the County should postpone consideration of any SEFs, including the current IS/MND for the facility proposed by Cool Earth, until a complete policy and review has been completed. Because large-scale solar facilities have not been approved as a land use compatible within the ECAP, none of the pending solar projects, including Cool Earth’s Altamont Solar Energy Center Project, should even be considered for approval by the County until these types of projects are deemed acceptable within the East County Area Plan envelope. If this is not done, SEFs installed prior to the policy enactment will have potential to set precedent for future policy as well as possibly avoiding complete environmental review by the County that would have otherwise been carried out under the eventual policy. The race to meet the State’s 33% Renewable Portfolio standard is not so urgent that postponing consideration of new SEFs until a complete and publicly reviewed policy is enacted will hamper the State’s ability to eventually comply with the standard.

Unresolved Conflicts with ECAP:
- The East County Area Plan (ECAP) states that “The County is prohibited from providing or authorizing expansion of public facilities or other infrastructure that would create more capacity than needed to meet the development allowed by the Initiative”.
  - The Proposed Policies Document did not address this ECAP policy. How does the County intend to alter this existing ECAP policy?
• Policy 44 states that the County shall encourage a diversity of job producing industries that reflect the skills of the local labor force.
  o Large-scale solar does not reflect the skill of the local labor force.
• Policies 52 and 53 relate to open space preservation. Open space includes natural resource lands and agricultural lands which the County, through ECAP, has committed to preserve.
  o Due to the nature of the large-scale solar developments that are being considered, they are incompatible with “open space” as defined by the aforementioned policies.

EBCNPS will continue to follow this issue and will have a representative at the September 13th meeting to make further comments on this subject. If you have any questions, please feel free to contact me at (510)-734-0335 or at conservation@ebcnps.org.

Sincerely,

Mack Casterman
Conservation Analyst
California Native Plant Society, East Bay Chapter
Statements of new Solar Coalition regarding Alameda County Solar Policy

1. Alameda County contains a treasure of open space lands rich with natural resources for agriculture, biological habitat, scenic views, and cultural heritage.

2. In 2000, the voters of Alameda County made a commitment to protect open space and agricultural land by approving Measure D. Measure D was specifically written to protect open lands from "excessive, badly-located and harmful development." This protection resonates with agriculturalists, ranchers, environmentalists, and the general public.

3. Current utility-scale Solar Energy Facility (SEF) applications in the Mountain House area would remove 50% of the remaining prime agricultural land in Alameda County from production (approximately 2000 acres would be developed out of 4000 acres that remain).

4. Raptors use these agricultural lands for foraging. Removal of these important feeding grounds will push raptors upslope and into the Altamont Pass Wind Resource Area where raptor deaths from wind turbines can be expected to increase. This effect will complicate scientific studies now underway to determine whether the wind turbine repowering program is effective in reducing raptor mortality.

5. If the county's proposed policies are adopted, all of North Livermore could be covered with solar arrays without mitigation for loss of farmland. Doolan Canyon, Collier Canyon, Suncl, the Vargas Plateau and other important sites could be affected.

6. We should be developing all urban solar sites first before undertaking the development of SEF on rural lands. These sites include parking lots, commercial and public buildings, residences, etc. After the opportunities for solar production in the urban areas have been exhausted, then we can think about using rural land.

Signatories: California Native Plant Society, East Bay Chapter  
Friends of Livermore  
Friends of the Vineyards  
Citizens for Open Space in Alameda County (Measure D Committee)

Contact: Mack Casterman  
conservation@ebcnps.org