

**Alameda County Planning Department
Large Commercial Solar and Battery Storage
Statement of Policy Components (draft March 28th, 2022)**

SECTION 1.

Context

The development of this Statement of Policy governing Large Commercial Solar and Battery Storage acknowledges primarily (1) the on-going climate change crisis and the need to mitigate its impacts; and (2) the State-wide goals of reducing dependence on fossil fuels and increasing renewable energy resources.

This Statement of Policy recognizes that the significant need to provide renewable resources, and that a thoughtful and measured contribution to this effort by Alameda County is consistent with the County's stated goals related to reducing dependency on fossil fuels and addressing climate change.

Since Alameda County is home to both large urban centers as well as large areas of open land, the use of some of this land for renewable energy generation is anticipated.

The East County General Plan and the Alameda County Zoning Ordinance are applicable documents and must be followed, including Measure D, with its goals of enhancing agriculture and protecting open space.

Once the Key Components of the Statement of Policy are approved by the Board of Supervisors, they will be incorporated into a draft Zoning Ordinance that will undergo environmental review under the California Environmental Quality Act prior to approval and adoption.

SECTION 2.

Premise

The County acknowledges the competing goals, and with this document aspires to balance the need for renewable energy with the desire to conserve open space, promote agriculture and protect biological resources (habitat).

The County's East County Area Plan (ECAP) as amended by Measure D is the critical document any project must comply with. While there is no language in the ECAP specific to solar development or battery storage, there is language in Policy 13 that allows new, expanded, or replacement infrastructure to meet the needs of East County, so long as it does not have an

excessive growth inducing effect. There are other policies in ECAP that generally support utilities if they are located appropriately.

The County Board of Supervisors has previously found that in the Large Parcel Agriculture (LPA) designation, solar development is comparable to other uses allowed, including public and quasi-public uses, windfarms, utility uses, and similar uses compatible with agriculture. Under Sections 17.54.050 and 17.54.060 of the Alameda County Zoning Ordinance, that establish a procedure for resolving “doubt as to the district classification of a use not listed in any part of this title”, the County has previously approved construction of privately-owned solar energy production facilities as an allowable use on lands that are designated by the East County Area Plan as Large Parcel Agriculture, and a conditionally permitted use in the A (Agriculture) District of the Zoning Ordinance.

Much of the infrastructure proposed in the form of solar and/or battery storage is improved or replacement infrastructure to increase the level of renewable energy going to the regional grid, both generation (solar) and storage (battery).

SECTION 3. POLICIES

Stability and Innovation

The ECAP recognizes wind power as a clean, renewable source of energy, its natural extension to solar and battery storage is reasonable to the extent the technologies are similar and compatible with agriculture.

Of the three large land use designations in ECAP, designate the LPA to allow solar/battery storage (not Resource Management (RM)/Water management (WM)). The LPA land use designation contains language allowing uses such as windfarms and related facilities, public, quasi-public uses, and utility corridors and is suitable for uses such as solar/battery storage.

LPA is currently where the bulk of applications are being proposed, and acknowledging LPA as a suitable location for this use is responsive to the market forces that are proposing to put both energy on the grid and facilitate grid stability through storage capacity (batteries).

(1) Allow solar/battery projects in the LPA area only, requires CUP and CEQA analysis. Determine these facilities to be electrical transmission corridor equipment (not defined as buildings.)

- Solar:**
- Projects under 100 acres can be Photovoltaic (PV) project (no serial projects)
 - Projects over 100 acres needs to be Agrivoltaic (AV) project (*see below, feasibility may vary depending on site conditions [soil, water])
 - 1000-acre cap on all solar projects (whether PV or AV)

- Battery Storage:**
- Battery Storage equipment and cabinets must be located near existing facilities (substations) to reduce transmission impacts.
 - Clarify that battery storage equipment and cabinets are not considered buildings and not subject to FAR requirements.
 - 300-acre cap on all battery storage projects

(2) Under the County’s Williamson Act Uniform Rules and Procedures Compatible, non-agricultural uses that do not qualify as buildings such as solar panels may be located outside a 2-acre building envelope **“but shall be cumulatively restricted to no more than 10% of the contracted property, or 10 acres, whichever is less.”** Uniform Rule 2.B.3 (commonly referred to as the 10/10 rule). The proposed policy would **require amendment** of the County’s uniform rule to allow more than 10/10.

- If proposal exceeds 10/10, then require project to be AV, should then be determined to be a compatible use.
- Williamson Act requires 100 acres minimum for contract, AV projects should be required in these cases and found to be contract-compliant
- Any change to WA Uniform Rules would have to be approved by State Department of Conservation.
- Amendment to 10/10 rule should not include prime land contracts
- Taxation not an issue, both value of Power Purchase Agreement and improvements are taxed. (verified by Assessor’s office)

(3) Important Farmland/Prime soils shall be **conserved by requiring 1:1 mitigation** or otherwise demonstrating that the soil can be **conserved** long term through the decommissioning and restoration plan. Mitigation could be on site or through purchase of lands elsewhere (preferably in the County).

- In areas designated important farmland or prime soils, the County should consider likelihood (Ag vs Potential for Ag) of land over 5-10 year probable use of the property, demonstrated by irrigation, owner history, location etc.
- Mitigation may not be required if soils are conserved through minimizing grading, minimal paved/gravel areas, and a decommissioning plan that includes re-establishing prime soil content. Expert input on how to implement this policy is needed.

(4) There are many facets of renewable energy where innovation should be fostered, and pilot projects should be encouraged (grants, demonstration projects, public/private partnerships)

Agrivoltaics (AV)*

- The Agrivoltaic concept varies from region to region, but a working definition is the establishment of both energy generation with active agriculture (grazing, crops) on the same site, also termed mixed or dual use.
- AV is a developing concept that developers have not yet embraced in Alameda County. Requiring large AV projects (100 acres +) could provide economies of scale to realize the benefits of a working farm/commercial solar on same land.
- AV should be attainable immediately and build upon the model established by already approved projects, including elements such as perimeter agricultural plantings, grazing underneath and/or between panels and other features of active agriculture. Intensive crop planting underneath and between panels, while most desirable, may not be feasible based on our climate, soil conditions or lack of water.
- As an incentive to attract more renewables (reduce soft costs and expedite project approvals), County should consider ways to expedite AV projects.
- The County should not expect or require more Agricultural production than what would occur otherwise without an AV project.

Other emerging solar

- Solar over aqueducts is also a developing model. Alameda County has potential to explore this model and follow other Counties (Turlock Irrigation District).
- Added benefit of reducing evaporation

Renewables in Urban Core

- Distributed Energy – aspirational goals to develop a viable distributed energy model that would take pressure from the rural area.
- These types of “in front of the meter” projects can be best implemented through collaboration with community-based electricity providers such as EBCE and others to a develop

rooftop/parking lot business model that would be attractive to Investor-Owned Utilities and Community Choice Aggregators.

- The County will take a leadership role for the entire county (unincorporated area and cities alike) by consulting with distributed generation experts to establish a permitting process, remove constraints, and provide appropriate incentives to accelerate the penetration of distributed energy generation and battery storage in the built environment. This will help preserve the agricultural and natural area of the county that are almost entirely in the unincorporated area.
- Pursue other zoning/land use changes to encourage more solar/battery deployment in the urban areas including commercial and industrial areas.

SECTION 4. IMPLEMENTATION

- Develop best practices for Agrivoltaics in Alameda County taking into consideration climate, soil conditions, and water availability.
- Draft, circulate and complete any Zoning Amendments needed to provide for Solar/Battery Storage as a conditional use in the Agricultural (A) district.
- Develop definitions as needed for inclusion into the Zoning ordinance.
- If desirable, draft amendments to Williamson Act Uniform Rules.
- Conduct CEQA review.
- Pursue demonstration projects (Microgrids, Solar along Aqueducts, Agrivoltaics) through academia and public/private partnerships
- Review policies after 5 years to determine efficacy and if changes are warranted

SECTION 5. SITE DEVELOPMENT STANDARDS (initial list)

- Limit impervious surfaces and gravel areas if prime soils
- 100' setbacks from major roads or alternative scenic mitigation (berms/landscaping etc.)
- Limitations on water usage
- Fire Prevention
- Groundwater protection
- Site restoration plan, decommissioning with financial surety

