County of Yolo

PLANNING AND PUBLIC WORKS DEPARTMENT

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PLANNING COMMISSION STAFF REPORT **FEBRUARY 10, 2011**

FILE #2010-005: Amend the zoning regulations in the County Code (Title 8, Chapter 2) by adding Section 8-2.2420 (Solar Facilities); and amending all other sections to allow small, medium, large, and very large solar facilities with either a Zoning Clearance, Site Plan Review, a Minor Use Permit, or a Major Use Permit.

APPLICANT: Yolo County

LOCATION: All parcels in the unincorporated Yolo County area zoned for all uses

SUPERVISOR: all districts

FLOOD ZONE: various

SOILS: various

FIRE ZONE: various

ZONING: Agricultural zones (A-P. A-1, AGI zones); Residential zones (the R-1, R-2, R-3, R-4, R-S and RRA zones); Commercial zones (the C-1, C-2, DMX, C-3, and C-H zones); and Industrial zones (the M-L, M-1 and M-2 zones)

GENERAL PLAN: Agricultural (AG); Open Space (OS), Parks and Recreation (PR), Public/Quasi-Public (PQ), Specific Plan (SP), Residential Rural, Very Low, Low, Medium, and High (RR, RL, RM, RH); Commercial Local and General (CL and CG); and Industrial designations (IN)

ENVIRONMENTAL DETERMINATION: to be determined

REPORT PREPARED BY:

Eric Parfrey, Principal Planner

REVIEWED BY:

David Morrison, Assistant Director

RECOMMENDED ACTION

That the Planning Commission recommends the Board of Supervisors take the following actions:

1. Hold a public workshop hearing and consider public comments on the Solar Facilities Ordinance (Attachment A); and

2. Adopt the Solar Facilities Ordinance, adding Section 8-2.2420 to the County Code (Title 8, Chapter 2).

REASONS FOR RECOMMENDED ACTION

In October, 2010, the Board of Supervisors requested that the Planning and Public Works Department prioritize the adoption of updated zoning regulations for solar facilities, based on several discussions of tentative proposals for solar projects in the unincorporated area. Two formal applications for solar projects have already been received by the department in the last year.

Previously enacted State law encourages the installation of solar energy systems in order to reduce demands on public utilities, and restricts the ability of local jurisdiction from placing onerous conditions on their approval in some circumstances. In addition, another State law, the Williamson Act, requires the County to make certain determinations and adopt findings that a proposed solar facility is a compatible use with the Williamson Act for lands under contract.

The 2030 Yolo Countywide General Plan and accompanying draft Climate Action Plan (CAP) include numerous policies and measures to reduce fossil fuel reliance and greenhouse gas emissions by strongly encouraging and, in some cases, requiring, conversion to solar energy sources. For example, the CAP calls for establishment of a Community Choice Aggregation program where 50% of overall County purchases are from 50% renewable sources, and 25% of all County energy purchases are 100% renewable. The draft CAP also assumes that all new homes approved by the County would be required to install solar water heaters and photovoltaic systems.

The proposed Yolo County ordinance for solar energy systems has been drafted to be consistent with both of the State laws, the Yolo County General Plan and draft Climate Action Plan.

BACKGROUND

The Planning Commission considered the issue at their last meeting on January 13, 2011. At the meeting, the Commission heard from members of the public and gave further directions to staff regarding the parameters and issues to be addressed in an ordinance regulating solar facilities of all sizes. Staff has now drafted an ordinance that incorporates the previous issues and the direction from the Commission.

STAFF ANALYSIS

The previous staff report discussed many of the issues that must be addressed in an ordinance to regulate solar facilities, including size and type of facility; whether the proposed project meets zoning and performance standards, whether the project is located on prime and/or Williamson Act contracted lands, and whether the project is found to be a consistent use with the Williamson Act.

The Planning Commission discussed the concepts included in the previous staff report and gave further direction to staff to consider when preparing the ordinance. Among the suggestions to staff, was to modify the size categories of solar applications by reducing the size threshold for "medium-sized" facilities and adding a "very large" category. Staff has revised the size categories included in the draft ordinance (Attachment A), accordingly.

The other major change or addition to the concepts outlined in the previous staff report is the role of agricultural and biological mitigation for solar projects. The previous staff report did not address these issues in detail. Staff has subsequently met with both the Agricultural Commissioner (John Young and his staff) and the director of the Natural Heritage Program (Maria Wong) to discuss how to address mitigation for the permanent loss of agricultural lands and for loss of Swainson's hawk foraging habitat. Based on those discussions, a graduated level of mitigation requirements for

agricultural and biological resources is proposed, based on the size and other characteristics of the proposed solar project under review.

Table 1 on the following page summarizes the proposed permitting and mitigation requirements for solar facilities in the draft ordinance.

Zoning District

Small and medium-sized solar facilities would be allowed in all zoning districts in the unincorporated area, with the exception that only small facilities would be allowed in residential zones. Large and very large solar energy systems would be allowed only within agricultural and public/quasi-public zoning districts.

Permitting Requirements

As noted in the previous staff report, solar facilities vary dramatically in size, depending on whether the system is generating electricity primarily for on-site uses such as a house or farm, or whether the project is a "utility size" project that feeds power into the statewide power grid. Small residential photovoltaic systems in the range of about 300 to 400 kilowatts (kw) are mounted on roofs or pole mounted in back yards. Under the proposed ordinance, these small systems could be located on agricultural, public/open space, residential, commercial, and industrial-zoned lands and would be subject only to building permit requirements, with an over-the-counter "Zoning Clearance" review by planners to ensure that the project conforms to required property line setbacks, height limits, and other standards. The threshold for small systems has been lowered from the previously recommended 1.5 megawatts (MW) to 0.5 MW (or 500 kilowatts).

The "medium-sized" category for regulating solar projects has been revised to include those generating between 0.5 MW and 5.0 MW of power. Projects in this range can be commercial or utility-sized, in contrast to small home or farm systems. However, facilities in this size may also be designed to serve primarily on-site uses, including providing electricity for large agricultural pumping operations, such as the River Garden farms west of Knights Landing.

Medium-sized solar facilities would be allowed through the issuance of either a non-discretionary Site Plan Review, or a discretionary Minor Use Permit approved by the Zoning Administrator following a public hearing. A Site Plan Review would normally be required if the project conforms to all standards, and the project is located on non-prime agricultural lands and disturbs less than 2.5 acres of Swainson's hawk foraging habitat. A Minor Use Permit would be required if the medium-sized solar facility is located on prime land or if it is incompatible with the Williamson Act, if it affects more than 2.5 acres of habitat, or if health and safety issues are raised.

For large solar energy systems generating between 5.0 MW and 20.0 MW, all applications would be subject to a Major Use Permit issued by the Planning Commission. Very large solar facilities in excess of 20 MW in size would be referred to the Board of Supervisors for approval of a Major Use Permit. Large and very large solar energy systems, and those medium-sized systems that are required to undergo discretionary review through a Use Permit, would be required to conform to setback and other environmental regulations, and to mitigate for loss of agricultural and habitat lands.

TABLE 1

PROPOSED PERMITTING REQUIREMENTS FOR SOLAR FACILITIES

Small solar systems (up to 0.5 MW)

Building Permit and Zoning Clearance required, for projects that meet the following criteria:

- meets all Building Code standards
- meets height, setback, and other zoning standards
- will impact less than 2.5 acres of prime agriculture soils or Swainson's hawk foraging habitat

Medium-sized solar systems (0.5 to 5.0 MW, could be up to 25-30 acres in total site area)

Site Plan Review (non-discretionary permit, but standard regulations attached) required for projects that meet the following criteria:

- meets all Building Code and zoning standards
- located on predominantly non-prime soils
- located on non-Williamson Act contracted land
- will impact less than 2.5 acres of Swainson's hawk foraging habitat (corresponding to de minimus finding for rural residence with building permit)
- no mitigation is required for permanent loss of agricultural land/soils or Swainson's hawk foraging habitat

Minor Use Permit (discretionary permit, with CEQA review and Conditions of Approval attached) required for the following projects:

- meets all Building Code and zoning standards
- located on predominantly prime soils and/or located on Williamson Act contracted land
- will impact more than 2.5 acres of Swainson's hawk foraging habitat
- mitigation required for permanent loss of agricultural land/soils or Swainson's hawk foraging habitat, to be determined by a study and type of system, in-lieu fee option available for both

Large solar systems (5.0 to 20.0 MW, could be up to 100-125 acres or more in total area)

Major Use Permit approved by the Planning Commission required with conditions:

- meet all Building Code and zoning standards
- findings of Williamson Act compatibility for contracted lands
- if project found not to be compatible with Williamson Act, non-renewal required
- mitigation required for permanent loss of agricultural land/soils or Swainson's hawk foraging habitat, to be determined by a study and type of system, in-lieu fee option available for both for up to 20 acres of impact, on-site or off-site easements required for over 20 acres of impact (no "stacking" of agricultural and Swainson's hawk easements allowed on the same land)

Very Large solar systems (over 20.0 MW)

Major Use Permit approved by the Board of Supervisors required with more conditions and more mitigation than specified above

Prime versus Non-Prime Lands

Staff does not recommend that solar facilities be prohibited on prime lands. One of the main criteria for companies seeking an appropriate location for a commercial solar system is proximity to a nearby PG&E substation and nearby transmission lines that have capacity to transit additional electricity. The location of PG&E substations in Yolo County is not readily available, because of security concerns, but PG&E does publish a generalized map that identifies areas in the county that have a "higher likelihood for successful photovoltaic generator interconnection" (Attachment B). Each of the highlighted areas contain at least one substation transformer, and the approximate capacity of the largest transformer is shown. The PG&E map identifies the areas of Woodland, Davis, midway between Woodland and Davis, West Sacramento, Esparto, and near the town of Yolo, as the most promising areas for solar facility interconnection. These are all areas of prime soils.

The proposed ordinance gives an incentive to projects that are located on non-prime lands. The ordinance has been structured to streamline approval of medium-sized solar facilities on predominantly non-prime soils, by allowing such applications to be approved with a non-discretionary Site Plan Review, rather than requiring a discretionary Minor Use Permit.

Land Requirements and Spacing of Solar Arrays

Industry representatives use the following "rule of thumb" to estimate the land needed for medium and large commercial solar facilities: five or six acres of land for each megawatt generated. This rule assumes a typical site plan of flat, open land devoted to closely spaced rows of panels on a single axis poles that can rotate to maximize solar collection. The County has recently accepted an application for a medium-sized 3.6 MW solar project that is proposed on a 32 acre parcel of land outside Winters. The project includes solar panel arrays set in rows approximately 120 feet long, 6.5 feet wide, with the rows spaced about 12 to 15 feet apart (Attachment C). Another medium-sized 1 MW solar facility was recently completed at the County's Monroe Center in Woodland. The Monroe Center project consists of 3,570 solar panels and provides eighty percent of the electricity needs for the juvenile and adult jail complex.

In contrast to small and medium-sized systems, large and very large utility sized solar facilities may generate electricity in the range of 10 to 40 MW or more. These industrial-sized facilities could require 50 to 500 acres or more of land. The plans for larger solar facilities may include much larger individual solar arrays that are spaced farther apart than the medium-sized systems. The only large or very large solar facility that has been proposed and approved in Yolo County is the approximately 150 acre OPDE project located along the western levee of the Sacramento Ship Channel. The OPDE project would generate 24 MW of power which would be transmitted to the Port of West Sacramento. The design includes over 24,100 solar panel arrays set on about 1,720 isolated concrete foundations along a three-mile long stretch of the 500-feet wide levee. The individual double axis-tracker arrays are set about 55 feet apart from each other (Attachment D).

The spacing of the solar arrays for large systems leads to the issue of whether it is feasible to retain (or establish) farming operations between the foundations, and whether there is a "permanent loss" of agricultural land or habitat.

Mitigation for Loss of Agricultural Land and Habitat

Under the proposed ordinance, medium-sized projects that impact less than 2.5 acres of Swainson's hawk foraging habitat will not be required to mitigate for loss of habitat or agricultural land. This threshold corresponds to the County's existing "de minimus" finding for new rural residences that may be approved with a building permit with no mitigation requirement.

The proposed ordinance requires that other medium-sized solar projects that disturb over 2.5 acres, as well as all large and very large solar facilities, must mitigate for the "permanent loss" of agricultural and habitat lands. The ordinance does not define "permanent loss." Rather, the loss of agricultural lands and habitat, whether "permanent" or temporary, is to be determined on a case-by-case basis by individual studies prepared by qualified professionals, including biologists. As noted above, the design of individual solar projects, including the spacing of the individual arrays, varies greatly and will determine the amount of mitigation that is required.

Solar projects that include tightly clustered rows of solar panels would be required to mitigate for the total area of the solar arrays, while much larger systems that have widely spaced arrays may be able to design the project so that some form of agriculture (row crops or grazing) can continue (or be established) between the foundations. Additionally, the case-by-case studies will determine if Swainson's hawk foraging habitat can be maintained between arrays, or whether mitigation will be required.

Finally, the studies may address the issue of "permanent" versus temporary loss of agricultural productivity and habitat. Some, if not all, of the medium, large, and very large solar projects will sign 20- or 25-year "Power Purchase Agreements" with utilities, which must be approved by the California Public Utilities Commission. For these larger projects, the County must address through the Use Permit and environmental review process whether it is possible to "reclaim" agricultural and habitat values on the land if the solar facilities are removed after 25 years and the land is restored to its previous condition. A surety bond will be required to ensure the appropriate reclamation of the site after the solar facilities are removed or become inoperative.

The proposed ordinance sets forth several types of mitigation that could be considered for both loss of prime agricultural lands and Swainson's hawk habitat.

Compatibility with Williamson Act

All applications for medium-sized and large solar facilities that are proposed on lands under Williamson Act would be subject to a determination and finding by the County that the use is compatible with the Act, as required by State law. It is assumed that a majority of medium, large, and very large solar facility applications could fall into this category of review. Conversely, small systems would not be subject to this determination but would be assumed to be a compatible use with any existing Williamson Act contract.

According to the California Department of Conservation solar guidelines, medium-sized to very large solar facilities may be found to be a compatible use under the Williamson Act if the project meets the following criteria:

- the proposed project would not significantly interfere with the underlying agricultural operation;
- the proposed project would displace a very small percentage of the overall agricultural operation.

The determination of Williamson Act compatibility would be made on a case-by-case basis under the proposed ordinance, using the State guidelines and County policies and regulations. As noted above, the proposed ordinance includes several types of mitigation that could be considered to address loss of prime agricultural lands and Swainson's hawk habitat.

OTHER AGENCY INVOLVEMENT

County Counsel has reviewed this staff report.

ATTACHMENTS

A: Draft Solar Facilities Ordinance
B: PG & E Solar Locator Map
C: Typical Medium-Sized Solar Arrays
D: OPDE Large Double Tracker Arrays

ATTACHMENT A

ORDINANCE NO. 2011-_____

(An Ordinance Adding Provisions to the Yolo County Code
Relating to Solar Facilities)

The Board of Supervisors of the County of Yolo hereby ordains as follows:

Section 1. Purpose.

The purpose of this Ordinance is to add provisions to the Yolo County Code to address the permitting of small to very large solar energy systems. The Ordinance is consistent with adopted State laws that encourage the construction of small solar systems to conserve energy. These changes are also necessary and appropriate to improve and enhance public welfare and safety, and to implement the Yolo County General Plan.

Section 2. Revisions to Title 8, Chapter 2, of the Yolo County Code.

A. New Definitions. The following definitions shall be added to Article 2 of Chapter 2 of Title 8 of the Yolo County Code, together with appropriate revisions to the table of contents to Chapter 2 of Title 8 to reflect the inclusion of new definitions:

Sec. 8-2.299.x Large solar energy system.
"Large solar energy system" shall mean a utility-scale solar energy conversion system consisting of many ground –mounted solar arrays in rows, and associated control or conversion electronics, which have a rated capacity of between 5.0 and 20.0 megawatts (MW), and that will be used to produce utility power to off-site customers.

Sec. 8-2.299.x Medium-sized solar energy system.
"Large solar energy system" shall mean a private on-site or utility-scale solar energy conversion system consisting of many ground –mounted solar arrays in rows or roof-panels, and associated control or conversion electronics, which have a rated capacity of between 0.5. and 5.0 megawatts (MW), and that will be used to produce utility power to on-site uses and off-site customers.

Sec. 8-2.299.x Small solar energy system.
"Small solar energy system" shall mean a single residential or small business -scale solar energy conversion system consisting of roof panels, ground –mounted solar arrays, or other solar energy fixtures, and associated control or conversion electronics, which have a rated capacity of up to 0.5 megawatts (MW), and that will be used to produce utility power primarily to on-site users or customers.

Sec. 8-2.299.x Very Large solar energy system.
"Very large solar energy system" shall mean a utility-scale solar energy conversion system consisting of many ground –mounted solar arrays in rows, and associated control or conversion electronics, which have a rated capacity of 20.0 megawatts (MW) or greater, and that will be used to produce utility power to off-site customers.

Section 3. Addition of Section 8-2.2420 to Title 8, Chapter 2, of the Yolo County Code.

Section 8-2.2420 shall be added to Chapter 2 of Title 8 of the Yolo County Code, and shall read in full as follows:

8-2.2420.1 Purpose

The purposes of this section are as follows:

(a) To provide for the placement of small to very large solar energy systems to enable generation of electricity from the sun, for on- and off-site uses, thereby reducing the consumption of electricity supplied by utility companies.

(b) To minimize potential adverse impacts associated with solar energy systems on area residents, historic sites, agricultural and biological resources through careful siting, design and operation, consistent with State law.

(d) To avoid or minimize public health and safety risks associated with solar energy systems by providing standards for the placement, design, construction, modification and removal of such systems, consistent with Federal, State and local regulations.

8-2.2420.2 Applicability.

The provisions of this section apply to small, medium-sized, large, and very large solar energy systems. These solar energy systems require the issuance of either a Building Permit, a Site Plan Review, a Minor Use Permit, or Major Use Permit, as set forth below. Any solar systems installed prior to the effective date of this section shall be treated as a prior nonconforming use pursuant to Article 26 of this Chapter unless, through the issuance of a permit pursuant to this section, they are subsequently made conforming.

8-2.2420.3 Locations and Approvals Required

(a) Permitted Locations. Solar facilities, depending on their size, may be located in the following zoning districts:

(1) Small and medium-sized solar energy systems may be installed and operated in the following districts, provided the systems meet setback and other standards, as provided in this Section: all agricultural districts (the Agricultural Preserve (A-P) Zone, the Agricultural General (A-1) Zone, and the Agricultural Industry (AGI) Zone); all residential districts (the Rural Residential (RRA) Zone, the Residential Suburban (R-S) Zone, the Residential One Family (R-1) Zone, the Residential One Family or Duplex (R-2) Zone, the Multiple- Family Residential (R-3) Zone, and the Apartment-Professional (R-4) Zone); all commercial districts (the Neighborhood Commercial (C-1) Zone, the Community Commercial (C-2) Zone, the Downtown Mixed Use (DMX) Zone, the General Commercial (C-3) Zone, and the Highway Commercial (C-H) Zone); all industrial districts (the Limited Industrial (M-L) Zone, the Light Industrial (M-1) Zone, and the Heavy Industrial (M-2) Zone; and all public and open space districts (the Public Open Space, Park and Recreation, Open Space, Waterfront, and Airport zones).

(2) Large and very large utility scale solar energy systems used to produce electricity for off-site customers may be installed and operated in the following districts, provided the systems meet all the standards and requirements, as provided in this Section: agricultural

districts (the Agricultural Preserve (A-P) Zone, the Agricultural General (A-1) Zone, and the Agricultural Industry (AGI) Zone), and public and open space districts (the Public Open Space, Park and Recreation, Open Space, Waterfront, and Airport zones).

(b) Approvals Required. The following types of approvals are required:

(1) Small solar energy systems may be approved through the issuance of a Building Permit and a Zoning Clearance, provided the application meets setback and other standards, as provided in this Section. However, consistent with Section 65850.5 of the California Government Code, if the Chief Building Official has a good faith belief that the solar energy system could have a specific, adverse impact upon the public health and safety, the Official may require the applicant to apply for a Use Permit. Such a Use Permit shall be issued according to the requirements of Section 65850.5.

(2) Medium-sized solar energy systems may be approved through the issuance of a Site Plan Review, consistent with Section 8-2.2701, provided the application meets the specific standards set forth in Section 8-2.2420.5, below. The Site Plan Review approval is ministerial (not discretionary) and does not require a public hearing. If the application fails to meet any of the standards, the application must be approved through the issuance of a Minor Use Permit by the Zoning Administrator, consistent with Section 8-2.3203.

(3) Large solar energy systems may be approved through the issuance of a Major Use Permit by the Planning Commission, consistent with Section 8-2.2804, provided the application is consistent with conditions and standards set forth in Section 8-2.2420.6, below.

(4) Very large solar energy systems may be approved through the issuance of a Major Use Permit by the Board of Supervisors, provided the application is consistent with conditions and standards set forth in Section 8-2.2420.6, below.

8-2.2420.4 Height and Setback Standards for Small Solar Energy Systems

Applications for small solar energy systems shall meet all of the following standards and any permit issued for such a system shall be conditioned to meet the standards:

(a) Photovoltaic solar energy systems may extend up to five (5) feet above the roof surface even if this exceeds the maximum height limit for the principle structure for the district in which it is located, or if this exceeds the height limit of an accessory structure (15 feet).

(b) Solar water or swimming pool heating systems may extend up to seven (7) feet above the roof surface even if this exceeds the maximum height limit for the principle structure for the district in which it is located, or if this exceeds the height limit of an accessory structure (15 feet).

(c) Excluding solar collection panels, solar energy system equipment may be installed within the required side and rear yard, but shall not be closer than two (2) feet from any property line.

(d) Pole mounted solar collection panels shall comply with existing regulations for accessory structures (Article 34 of Chapter 2, Title 8 of the County Code), i.e., the panels may not exceed ten (10) feet in height in residential zones and must meet a rear yard setback of five (5) feet.

(e) Solar facilities proposed on a property or structure that is a designated Historic Landmark or is located within a designated Historic District may be permitted provided that the design of the facilities is consistent with the purposes of the Landmark or District designation.

8-2.2420.5 Design Standards for Medium-Sized Solar Energy Systems

Design Standards. Applications for medium-sized solar energy systems shall meet all of the following standards. If the application does not meet one or more of the standards, a Minor Use Permit shall be required and shall be conditioned to meet the standards, unless findings of fact to justify a waiver of any of the standards are adopted by the Zoning Administrator:

(a) Medium-sized solar energy systems shall comply with subsections (a) through (c) of Section 8-2.2420.4, above.

(b) Medium-sized solar facilities shall be located on predominantly non-prime lands and located on non-Williamson Act contracted land. If the facility is located on predominantly prime soils, a Minor Use Permit shall be required and shall include conditions for mitigation for the permanent loss of agricultural land, according to subsection (h), below. If the facility is located on lands under a Williamson Act contract, a Minor Use Permit shall be required and shall include findings that the proposed facility is a compatible use under the Williamson Act or, if the project cannot be found to be a compatible use, then a condition of the Minor Use Permit shall require non-renewal of the contract.

(c) Ground-mounted solar facilities shall meet the following setback standards:

(1) In agricultural and open space zones: setbacks of at least 50 feet from all property lines, and setbacks of at least 150 feet from the nearest occupied residence in a residential zone.
(2) In industrial and commercial zones: setbacks of at least 20 feet from all property lines that abut a residential zone.

(d) Ground-mounted solar facilities shall meet a height limit of no more than twenty (20) feet above the ground in the agricultural and open space zones, and no more than fifteen (15) feet above the ground in the industrial and commercial zones.

(e) The proposed solar facility shall be designed to minimize any glare or lighting on adjacent neighbors.

(f) The proposed solar facility shall be designed to minimize any identified impacts to adjacent agricultural operations, such as orchards that require aerial application of chemicals, which may require greater setbacks than those required in subsection (c), above.

(g) The proposed solar facility shall be designed to minimize any identified impacts to natural features, e.g., sensitive and listed wildlife species and habitat, water courses, or heritage trees.

(h) If the proposed solar facility will impact less than 2.5 acres of Swainson's hawk foraging habitat, no mitigation is required for the permanent loss of agricultural land or Swainson's hawk foraging habitat. If more than 2.5 acres of habitat is affected, a Minor Use Permit shall be required and shall include conditions for mitigation for the permanent loss of agricultural land and Swainson's hawk foraging habitat, at a ratio of at least 1:1 (one acre mitigated for one acre lost). The amount of permanent loss shall be determined by an analysis of such impacts, prepared by licensed professional(s). Mitigation for the permanent loss of agricultural land and Swainson's hawk foraging habitat may be satisfied by payment of an in-lieu fee for both resources up to a total of twenty (20) acres for each resource, dedication of easements either on-site or off-site, or other arrangements satisfactory to the County and the County's Natural Heritage Program. Easements for agricultural land and Swainson's hawk foraging habitat may not be "stacked" on the same land.

8-2.2420.6 Design Standards for Large and Very Large Solar Energy Systems

Design Standards. Applications for large and very large solar energy systems shall meet all of the following standards and any Major Use Permit issued for such systems shall be conditioned to meet the standards, unless findings of fact to justify a waiver of any of the standards are adopted by the Planning Commission or the Board of Supervisors:

(a) Large and very large solar energy systems shall comply with subsections (e) through (h) of Section 8-2.2420.5, above.

(b) Ground-mounted solar facilities shall meet setback standards of at least 100 feet from all property lines, and setbacks of at least 250 feet from the nearest occupied residence.

(c) Ground-mounted solar facilities shall meet a height limit of no more than twenty-five (25) feet above the ground.

(d) The footprint of solar facilities in contact with the ground should generally not exceed five percent (5%) of the total property. The total surface area of the array and any roads and ancillary equipment shall not exceed thirty five percent (35%) of the total property.

(e) Large and very large solar facilities may be found to be a compatible use under the Williamson Act, and approved with all necessary conditions, if the Planning Commission or the Board of Supervisors determines that the project meets all of the following criteria:

(1) The proposed project would not significantly interfere with the underlying agricultural operation.

(2) The proposed project would displace a very small percentage of the overall agricultural operation.

(3) Most or all of the facilities have been located on poorer quality soils (i.e., non-prime Class 2 or 3 soils),, or most or all of the facilities have been located on prime soils but mitigation to maintain existing soils permanently, and/or create additional agricultural and habitat value has been approved as conditions of the project. Mitigation could include, but is not limited to:

(i) Dedication of conservation easements to mitigate for permanent agricultural land and/or foraging habitat loss in excess of a ratio of 1:1;
(ii) Solar arrays have been designed to be widely-spaced (i.e. with a minimum of 35 feet between structures) to allow maximum agricultural production and encourage Swainson's hawk and other raptor foraging between the arrays.
(iii) Solar panels are designed to rotate on at least one axis - preferable vertical - to provide sunlight below the panels to accommodate plant growth and to avoid a "scorched earth" appearance.
(iv) Lands within the solar array (i.e. between panels) shall be managed to accommodate grazing for livestock production where crop production cannot be accommodated.
(v) At least 25 percent of non-crop areas will remain un-mowed or un-grazed to provide refuge to prey species for raptor foraging
(vi) Orchards or vineyards have been removed to create appropriate row crop for Swainson's hawk foraging habitat.
(vii) Crops such as alfalfa, tomatoes, and other low row crops have been planted in place of poor foraging crops such as corn, safflower, etc.

(4) Solar facilities proposed in rice growing areas may be considered compatible only if solar equipment can be installed between the cultivated fields or along irrigation dikes.

(f) Mitigation for the permanent loss of agricultural land or Swainson's hawk and other habitat shall be provided according to Section 8-2.2420.5(h), above.

8-2.2420.7 Abandonment, Financial Surety, and Other Violations.

(a) A solar energy system, other than a small system, that ceases to produce electricity on a continuous basis for eighteen 18 months shall be considered abandoned. Facilities deemed by the County to be unsafe and facilities erected in violation of this section shall also be subject to this Section 8-2.2420.7. The code enforcement officer or any other employee of the Planning and Public Works Department shall have the right to request documentation and/or affidavits from the system owner/operator regarding the system's usage, and shall make a determination as to the date of abandonment or the date on which other violation(s) occurred.

(b) Upon a determination of abandonment or other violation(s), the County shall send a notice hereof to the owner/operator, indicating that the responsible party shall remove the solar energy system and all associated facilities, and remediate the site to its approximate original condition within ninety (90) days of notice by the County, unless the County determines that the facilities must be removed in a shorter period to protect public safety. Alternatively, if the violation(s) can be addressed by means short of removing the solar energy system and restoring of the site, the County may advise the owner/operator of such alternative means of resolving the violation(s).

(c) In the event that the responsible parties have failed to remove the solar energy system and/or restore the facility site or otherwise resolve the violation(s) within the specified time period, the County may remove the solar energy system and restore the site and may thereafter initiate judicial proceedings or take any other steps authorized by law against the responsible parties to recover costs associated with the removal of structures deemed a public hazard.

(d) Financial Surety. Prior to the issuance of a building permit authorizing installation of a solar energy system, other than a small system or medium-sized system approved through a Site Plan Review, the applicant shall provide a demolition surety in a form and amount deemed by the County to be sufficient to remove and dispose of the wind energy system and restore the site to its approximate preconstruction condition. The County shall draw upon this surety in the event the responsible party fails to act in accordance with the provisions of this section within ninety (90) days of termination of operations, or upon determination by the County that the solar energy system is unsafe, has been abandoned, or is in violation of this chapter. The surety shall remain in effect until the solar energy system is removed.

Section 4. Revisions to Articles 4, 6, 6.1, 7, 7.1, 12, 13, 14, 15, 16, 17, and 18 of Title 8, Chapter 2, of the Yolo County Code.

1. Use Permit Required and Height Regulations Amended. [to be completed]
2. Accessory Use Regulations Amended. [to be completed]
3. Agricultural Conservation Easement Program Amended . [to be completed]

Section 5. Severability.

If any section, subsection, sentence, clause or phrase of this Ordinance is held by court of competent jurisdiction to be invalid, such decision shall not affect the remaining portions of this ordinance. The Board of Supervisors hereby declares that it would have adopted this Ordinance and each section, sentence, clause or phrase thereof irrespective of the fact that one or more sections, subsections, sentences, clauses or phrases be declared invalid.

Section 6. Effective Date.

This Ordinance shall take effect and be in force thirty (30) days following its adoption and, prior to the expiration of fifteen (15) days after its adoption, it shall be published once in the Davis Enterprise, a newspaper of general circulation, printed and published in the County of Yolo, with the names of the Board members voting for and against the Ordinance.

PASSED AND ADOPTED by the Board of Supervisors of the County of Yolo, State of California, this __ day of _____, 2011, by the following vote:

AYES:
NOES:
ABSENT:
ABSTAIN:

By_____
Matt Rexroad, Chair
Yolo County Board of Supervisors

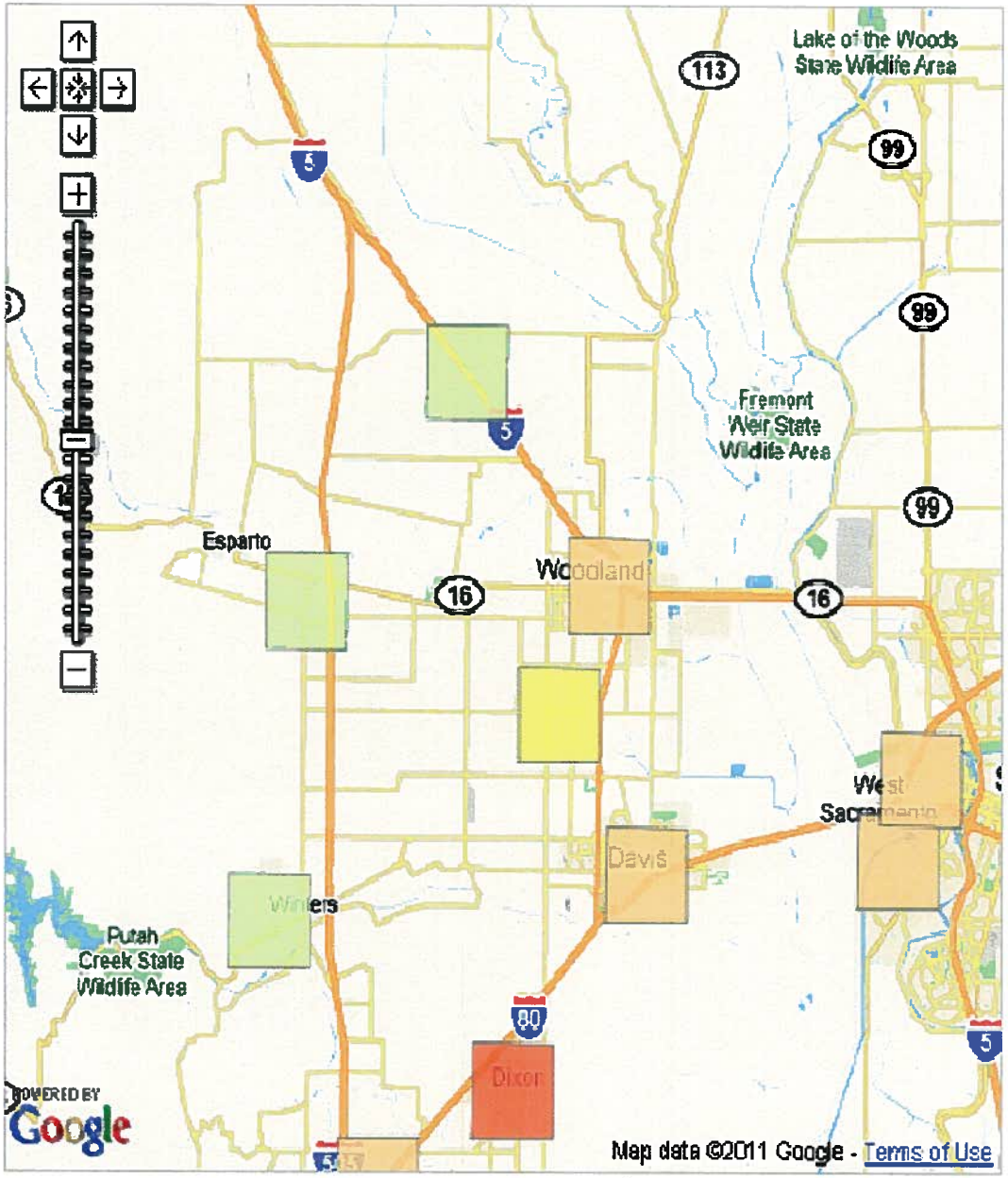
Attest:
Julie Dachtler, Deputy Clerk
Board of Supervisors

By:_____
Deputy (Seal)

Approved as to Form:
Robyn Truitt Drivon, County Counsel

By:_____
Philip J. Pogledich, Senior Deputy

Any application for interconnection to PG&E's distribution system must be directed to our Generation Interconnection at gen@pge.com



PV Map Legend

- Show All Locations
- Area with 10 MVA to 20 MVA
- 12kV area with 20 MVA to 30 MVA
- 12kV area with 30 MVA to 45 MVA
- 12kV area with > 45 MVA
- 21kV area with 20 MVA to 30 MVA
- 21kV area with 30 MVA to 45 MVA
- 21kV area with > 45 MVA

Google Earth Mapping Data

ATTACHMENT A

ATTACHMENT B

ATTACHMENT C