



AIRPORT LAND USE COMMISSION RIVERSIDE COUNTY AGENDA

Riverside County Administration Center
4080 Lemon St., Hearing Room (1st Floor)
Riverside, California

Thursday 9:00 a.m., April 8, 2010

CHAIR
Simon Housman
Rancho Mirage

VICE CHAIRMAN
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Riverside

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Riverside

Robin Lowe
Hemet

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John Guerin
Russell Brady
Barbara Santos

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NOTE: If you wish to speak, please complete a "SPEAKER IDENTIFICATION FORM" and give it to the Secretary. The purpose of the public hearing is to allow interested parties to express their concerns. Comments shall be limited to 5 minutes and to matters relevant to the item under consideration. Please do not repeat information already given. If you have no additional information, but wish to be on record, simply give your name and address and state that you agree with the previous speaker(s). Also please be aware that the indicated staff recommendation shown below may differ from that presented to the Commission during the public hearing.

Non-exempt materials related to an item on this agenda submitted to the Airport Land Use Commission or its staff after distribution of the agenda packet are available for public inspection in the Airport Land Use Commission's office located at 4080 Lemon Street, 9th Floor, Riverside, CA 92501 during normal business hours.

In compliance with the Americans with Disabilities Act, if any accommodations are needed, please contact Barbara Santos at (951) 955-5132 or E-mail at basantos@rctlma.org. Request should be made at least 48 hours or as soon as possible prior to the scheduled meeting.

1.0 INTRODUCTIONS

1.1 CALL TO ORDER

1.2 SALUTE TO FLAG

1.3 ROLL CALL

2.0 PUBLIC HEARING: NEW BUSINESS

BERMUDA DUNES AIRPORT

- 2.1 ZAP1040BD10 – T-Mobile West (Representative: Maryann Harwood) – City Case No. CUP 09-12-948 (Conditional Use Permit). CUP 09-12-948 is a proposal to construct a 70 foot tall monopalm wireless facility including six BTS equipment cabinets, twelve panel antennas, and one parabolic antenna. (Bermuda Dunes Airport: Zone C). ALUC Staff Planner: John Guerin at (951) 955-0982, or e-mail at jguerin@rctlma.org or Russell Brady at (951) 955-0549, or e-mail at rbrady@rctlma.org.

Staff Recommendation: CONSISTENT

PERRIS VALLEY AIRPORT

- 2.2 ZAP1003PV10 – City of Perris (Representative: Brad Eckhardt, Planning Manager) – City Case No. SPA 08-08-0004 (Specific Plan Amendment). The City proposes to adopt a comprehensive revision to the Downtown Specific Plan. The plan designates allowable land uses and densities and prescribes development standards within the 735-acre Downtown Perris area, which is located southerly/southwesterly of Interstate 215, northerly of Ellis Avenue, westerly of Redlands Avenue, and easterly of “A” Street. The existing Specific Plan was adopted in 1993 and allows for a mix of residential, commercial, industrial, and public land uses at various densities. The comprehensive revision is designed around a Regulating Code that focuses on the form and placement of buildings, with the intent of developing a Transit-Oriented Community (focusing on the future Metrolink Station) with a mix of land uses at densities that support transit and meet Housing Element requirements. (Perris Valley Airport: Zones I, II, III on current map; A through E on proposed plan). ALUC Staff Planner: John Guerin at (951) 955-0982, or e-mail at jguerin@rctlma.org or Russell Brady at (951) 955-0549, or e-mail at rbrady@rctlma.org.

Staff Recommendation: CONTINUANCE TO MAY 13, 2010

BLYTHE AIRPORT

- 2.3 ZAP1006BL10 – Palo Verde Solar I, LLC – California Energy Commission Docket No. 09-AFC-6. The project proposes to construct a nominal 1,000 megawatt solar thermal electric generating facility on 9,400 acres of BLM managed land, including four units of north-south oriented tracking parabolic trough mirrors, four 120-foot tall air-cooled condensers, a 230 kV transmission line with maximum 145-foot tall monopoles, and a four-inch diameter 9.8-mile long natural gas pipeline. (Blythe Airport: Zones B1, C, D, and E). ALUC Staff Planner: John Guerin at (951) 955-0982, or e-mail at jguerin@rctlma.org or Russell Brady at (951) 955-0549, or e-mail at rbrady@rctlma.org.

Staff Recommendation: CONTINUANCE TO MAY 13, 2010

3.0 PUBLIC HEARING: OLD BUSINESS (CONTINUED FROM MARCH 11, 2010)**BLYTHE AIRPORT**

- 3.1 ZAP1005BL09 – US Solar Holdings, LLC (Representative: Tanya Martinez) – City Case No. CUP 2009-01 (Conditional Use Permit). A proposal to develop a 100 megawatt (MW) solar photovoltaic (PV) renewable energy facility (to be built in 20 MW phases) on 640 acres within an 829-acre area on the grounds of the Blythe Airport, to the east of Runway 17-35 and to the north of Runway 8-26, in portions of Township 6 South, Range 22 East, Sections 20 and 29. The project will include maintenance enclosures less than 25 feet in height. Blythe Airport is located northerly of Interstate 10 and Hobsonway and easterly of Mesa Drive. (Airport Compatibility Zones C and D of the Blythe Airport Influence Area). ALUC Staff Planner: John Guerin at (951) 955-0982, or e-mail at jguerin@rctlma.org or Russell Brady at (951) 955-0549, or e-mail at rbrady@rctlma.org.

Staff Recommendation: CONTINUANCE TO MAY 13, 2010

4.0 **APPROVAL OF MINUTES**
March 11, 2010

5.0 **ORAL COMMUNICATION ON ANY MATTER NOT ON THE AGENDA**

6.0 **COMMISSIONER'S COMMENTS**

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COUNTY OF RIVERSIDE AIRPORT LAND USE COMMISSION

STAFF REPORT

AGENDA ITEM: 2.1

HEARING DATE: April 8, 2010

CASE SUMMARY:

CASE NUMBER: ZAP1040BD10 – T-Mobile West (Representative: Maryann Harwood)

APPROVING JURISDICTION: City of Indio

JURISDICTION CASE NO: CUP 09-12-948

RECOMMENDATION: Staff recommends a finding of CONSISTENCY, subject to the conditions included herein.

PROJECT DESCRIPTION: CUP 09-12-948 is a proposal to construct a 70 foot tall monopalm wireless facility including six BTS equipment cabinets, twelve panel antennas, and one parabolic antenna.

PROJECT LOCATION: The project site is located at 81929 Indio Boulevard within the City of Indio. The site contains an existing restaurant business as well as an existing 58 foot tall monopalm wireless facility. The proposed wireless facility would be located along the western boundary of the property.

LAND USE PLAN: 2004 Bermuda Dunes Airport Land Use Compatibility Plan

Adjacent Airport:

- a. Airport Influence Area: Bermuda Dunes Airport
- b. Land Use Policy: Airport Compatibility Zone C
- c. Noise Levels: 55-60 CNEL

BACKGROUND:

Noise: The site is located outside the area subject to average aircraft noise levels exceeding 60 CNEL, and the use is not noise-sensitive; therefore, no special measures to mitigate aircraft-generated noise are required.

PART 77: The applicant's maximum proposed pad elevation on site is 5.0 feet above mean sea level (AMSL) with a maximum structure height of 70 feet. The runway elevation at its nearest point to the project boundaries is approximately 49 feet AMSL. At an approximate distance of 11,170 feet and relevant slope of 100:1, any structure above 160.7 feet AMSL would require FAA review. The proposed project would not exceed 160.7 feet AMSL, therefore FAA review is not required.

CONDITIONS:

1. Any outdoor lighting that is installed shall be hooded or shielded so as to prevent either the spillage of lumens or reflection into the sky.
2. The following uses shall be prohibited:
 - (a) Any use which would direct a steady light or flashing light of red, white, green, or amber colors associated with airport operations toward an aircraft engaged in an initial straight climb following takeoff or toward an aircraft engaged in a straight final approach toward a landing at an airport, other than an FAA-approved navigational signal light or visual approach slope indicator.
 - (b) Any use which would cause sunlight to be reflected towards an aircraft engaged in an initial straight climb following takeoff or towards an aircraft engaged in a straight final approach towards a landing at an airport.
 - (c) Any use which would generate smoke or water vapor or which would attract large concentrations of birds, or which may otherwise affect safe air navigation within the area. (Such uses include trash transfer stations that are open on one or more sides, recycling centers containing putrescible wastes, construction and demolition debris facilities, incinerators, fly ash disposal, production of cereal grains, sunflower, and row crops, aquaculture, and landscaping utilizing water features.)
 - (d) Any use which would generate electrical interference that may be detrimental to the operation of aircraft and/or aircraft instrumentation.
 - (e) Children's schools, hospitals, and nursing homes.
3. The attached notice shall be provided to all potential purchasers of the property and tenants of the buildings.

COUNTY OF RIVERSIDE AIRPORT LAND USE COMMISSION

STAFF REPORT

AGENDA ITEM: 2.2

HEARING DATE: April 8, 2010

CASE NUMBER: ZAP1003PV10 – City of Perris (Representative: Brad Eckhardt, Planning Manager)

APPROVING JURISDICTION: City of Perris

JURISDICTION CASE NO: SPA 08-08-0004

MAJOR ISSUES: At this time the draft Perris Valley Airport Compatibility Plan has not been sent out for public review of its environmental determination nor received formal review and approval by the Commission. Therefore, this project will be reviewed based on the existing 1979 Perris Valley Airport Land Use Plan. The 1979 Perris Valley Airport Land Use Plan does not define any Airport Influence or Compatibility Zones, simply an Airport Influence Area Boundary.

RECOMMENDATION: At this time staff has not completed their review of the specific plan. Staff recommends that the Commission CONTINUE this item to May 13, 2010 without discussion.

PROJECT DESCRIPTION:

The City of Perris proposes to adopt a comprehensive revision to the Downtown Specific Plan. The plan designates allowable land uses and densities and prescribes development standards within the 735-acre Downtown Perris area, which is located southerly/southwesterly of Interstate 215, northerly of Ellis Avenue, westerly of Redlands Avenue, and easterly of “A” Street. The existing Specific Plan was adopted in 1993 and allows for a mix of residential, commercial, industrial, and public land uses at various densities. The comprehensive revision is designed around a Regulating Code that focuses on the form and placement of buildings, with the intent of developing a Transit-Oriented Community (focusing on the future Metrolink Station) with a mix of land uses at densities that support transit and meet Housing Element requirements. (Perris Valley Airport: A through E on draft proposed plan).

PROJECT LOCATION:

The area included within the proposed Specific Plan is located southwestly of Interstate 215, northerly of Ellis Avenue, westerly of Redlands Avenue and easterly of “A” Street in the City of Perris, and, at its closest point, approximately 200 feet northerly of the northerly end of Runway 15/33 of the Perris Valley Airport.

LAND USE PLAN: 1979 Perris Valley Airport Land Use Plan

- a. Airport Influence Area: Perris Valley Airport
- b. Land Use Policy: Riverside County Airport Land Use Compatibility Plan
Countywide Policies

BACKGROUND:

Land Use: The specific plan regulation utilizes what is referred to as a “form-based code” utilizing “transects” which regulates more the style and look of the development rather than the specific uses allowed within a designation. The specific plan does give some basic guidance on preferred land uses and basic development standards, including maximum number of building stories, but not specific building height or development intensity. This makes it difficult to determine whether what the specific plan allows is consistent with the regulations of the Airport Land Use Compatibility Plan.

A portion of the specific plan is located within the 1979 Perris Valley Airport Influence Area. Since the existing plan for the Perris Valley Airport does not delineate individual zones, the Countywide Policies of the Riverside County Airport Land Use Compatibility Plan are solely applicable to staff’s and the Commission’s review of the specific plan. These policies do not provide any specific restrictions or requirements for land use intensity, including residential density, population density, non-residential floor area ratio, or structure height since these are dependent on specific compatibility zone designations. FAA Part 77 regulations would still be applicable to any implementing project proposing specific buildings.

The entire specific plan is located within the airport influence area of the draft Perris Valley Land Use Compatibility Plan. All Zones would be affected by the specific plan excluding the B2 Zone of the draft plan.

Part 77: The Specific Plan does not itself authorize the development of structures, however when specific projects are proposed, they may be required to be reviewed by the FAA pursuant to Part 77.

CONDITIONS:

1. In accordance with this Specific Plan, prior to the issuance of building permits for any new development within this area, the landowner shall convey an aviation easement to the Perris Valley Airport.
2. Any outdoor lighting installed shall be hooded or shielded to prevent either the spillage of lumens or reflection into the sky. Outdoor lighting shall be downward facing.

3. The following uses shall be prohibited:
 - (a) Any use which would direct a steady light or flashing light of red, white, green, or amber colors associated with airport operations toward an aircraft engaged in an initial straight climb following takeoff or toward an aircraft engaged in a straight final approach toward a landing at an airport, other than an FAA-approved navigational signal light or visual approach slope indicator.
 - (b) Any use which would cause sunlight to be reflected towards an aircraft engaged in an initial straight climb following takeoff or towards an aircraft engaged in a straight final approach towards a landing at an airport.
 - (c) Any use which would generate smoke or water vapor or which would attract large concentrations of birds, or which may otherwise affect safe air navigation within the area. (Such uses include landscaping utilizing water features, aquaculture, livestock operations, production of cereal grains, sunflower, and row crops, artificial marshes, wastewater management facilities, composting operations, trash transfer stations that are open on one or more sides, recycling centers containing putrescible wastes, construction and demolition debris facilities, fly ash disposal, incinerators, and landfills.)
 - (d) Any use which would generate electrical interference that may be detrimental to the operation of aircraft and/or aircraft instrumentation.
4. The attached notice shall be provided to all potential purchasers and tenants.
5. Any retention basin shall be designed so as to provide a maximum 48-hour detention period for the design storm (may be less, but not more), and to remain totally dry between rainfalls. Vegetation in and around the retention basin that would provide food or cover for bird species that would be incompatible with airport operations shall not be utilized in project landscaping.
6. Noise attenuation measures shall be incorporated into the design of office areas of structures, as necessary to ensure interior noise levels from aircraft operations are at or below 45 CNEL.

COUNTY OF RIVERSIDE
AIRPORT LAND USE COMMISSION
STAFF REPORT

AGENDA ITEM: 2.3

HEARING DATE: April 8, 2010

CASE NUMBER: ZAP1006BL10 – Palo Verde Solar I, LLC
(Representative: Howard Balentine)

APPROVING JURISDICTION: California Energy Commission

JURISDICTION CASE NO.: 09-AFC-06

MAJOR ISSUES: Materials submitted with the application include analysis of the proposed project’s impacts from structure heights, radio frequency interference, reflectivity/glare, and thermal plumes. While the analysis addresses each impact at length, substantial information is not provided to determine the actual anticipated impacts on the Blythe Airport. In addition, information on provision of a minimum 10% open space area within Compatibility Zone D and analysis on cumulative impacts of hazards to flight were not included. ALUC staff prepared a letter (attached to this staff report) to the applicant on March 22nd requesting the specific additional information needed by staff to make a recommendation of consistency to the Commission.

RECOMMENDATION: At the time of the writing of this staff report, staff has not received the requested information from the applicant or their representative. The applicant’s representative has indicated that the requested information would not be able to be provided by the April 8th hearing and has requested a continuance. *Staff recommends that the Commission CONTINUE this matter without discussion to the meeting of May 13, 2010, pending submittal, review, and adequacy of the requested information.*

PROJECT DESCRIPTION:

The project proposes to construct a nominal 1,000 megawatt solar thermal electric generating facility on 9,400 acres of BLM managed land, including four units of north-south oriented tracking parabolic trough mirrors, four 120-foot tall air-cooled condensers, a 230 kV transmission line with maximum 145-foot tall monopoles, and a four-inch diameter 9.8-mile long natural gas pipeline.

PROJECT LOCATION:

The project site is located northwesterly of the Blythe Airport, with the closest parcel located approximately 4,650 feet northwesterly of the north end of Runway 17-35, in Sections or portions of Sections 1-5, 8-15, 23-24 of Township 6 South, Range 21 East and in Sections or portions of Sections 6, 7, and 18 of Township 6 South, Range 22 East. Blythe Airport is located northerly of Interstate 10 and Hobsonway and easterly of Mesa Drive, in unincorporated Riverside County.

LAND USE PLAN: 2004 Blythe Airport Land Use Compatibility Plan

- a. Airport Influence Area: Blythe Airport
- b. Land Use Policy: Airport Compatibility Zones B1, C, D, and E
- c. Noise Levels: Outside the 55 CNEL contour

BACKGROUND:

California Energy Commission: Due to the project being a thermal solar project exceeding 50 Megawatts, the project's review falls under the jurisdiction of the California Energy Commission (CEC). At this time, the CEC has released a Staff Assessment and Draft Environmental Impact Statement (EIS), which includes analysis of the project's impact on the Blythe Airport. In order for the CEC to better determine the project's consistency with applicable laws, ordinances, regulations and standards (LORS), the EIS recommended that the proposed project file an application with the RCALUC to determine consistency with the Blythe Airport Compatibility Plan. The determination of consistency by the ALUC is advisory to the CEC.

Flight Hazard Issues: Structure height, electrical interference, reflectivity/glare, and thermal plumes are among the issues that renewable energy facilities in the airport influence area must address. The majority of structures proposed by the project are located outside of the Blythe Airport Area. The southeasterly most portion of the project, Solar Unit #4, is located within Zones D and E. The majority of structures of substantial height are located at the center of the solar unit, known as the power block. Within this power block is located the 120 foot air cooled condenser (ACC). According to the materials provided, the ACC is located just outside of the Airport Influence Area and therefore would not be subject to its height restrictions. Staff has requested a more detailed map showing the boundaries of the AIA in relation to the precise location of the ACC.

The 230 kV transmission line generally crosses southerly from the main project site across Compatibility Zones E, D, C, and B1 perpendicular to runway 8/26 before turning westerly to its connection with the SCE substation. The maximum height of the transmission poles to be 145 feet spaced 1,000 feet apart with a portion of the

transmission line's poles being limited to 90 feet in height spaced 800 feet apart. No map based information was provided with the application showing the height of the transmission poles in relation to the Airport Compatibility Zones. This information has been requested to determine consistency with height restrictions for each applicable Compatibility Zone as well as flight path clearance of the transmission poles. All other structures associated with the project meet the height restrictions of the applicable Compatibility Zones.

The electromagnetic signal/noise emanating from the operation of electrical equipment of the project will be at base frequency 60 hertz with less intense higher frequencies from harmonics. Navigation and communication signals typically utilized are substantially higher in frequency and therefore would not be impacted by electrical equipment proposed by the project. Information has been requested to confirm the signals in use at the Blythe Airport.

The 230 kV electrical transmission line proposed by the project have long been known to produce electric fields which may interfere with radio signals. The materials state that such interference is usually only of concern for lines of 345 kV and above. In addition, the amount of interference depends on other factors such as distance from the line to the receiving device, orientation of the antenna, signal level, line configuration and weather conditions. Information was requested on a maximum level scenario and its impacts to aircraft operations at the Blythe Airport.

The project proposes to collect thermal solar energy via reflective parabolic troughs that redirect the sun's light to a Heat Conduction Element (HCE) that absorbs the heat generated and distributes it for conversion to steam energy for electricity generation by turbine. Although the majority of the reflected light is focused directly onto the HCE, some scattering of light may occur from the HCE, but not directly from the mirrored trough.

The materials submitted with the application include diagrams of how the parabolic trough functions and sample photographs from the solar array at Kramer Junction of light reflection and scattering from the HCE. These indicate that at a specific geometry of the HCE and the observer, there is a concentrated scattering of light from the HCE. The proposed project will construct a 25 foot tall windscreen which will block the scattering from observers from ground level.

In addition, the materials submitted include a sample analysis done for the Victorville 2 Hybrid Power Project (VV2), which is proposed to be located adjacent to the Southern California Logistics Airport (SCLA). As part of the review of this project a test over-flight utilizing the solar array at Kramer Junction and simulating an approach to land based on the proposed layout of the VV2 project and its relation to the SCLA. Comments were also included from staff from the CEC and City of Victorville that participated in the test. Their comments indicated that there was no glare created by the solar array based on the flight simulation conducted. Although this test and the comments received from it indicate there is little concern for substantial glare to occur

that would create a significant hazard to flight, there was no information provided to compare the layout of the VV2 project to the proposed Blythe project to determine if its conclusions are applicable.

The project proposes to cool waste heat from the steam cycle in each power block utilizing an air-cooled condenser (ACC). The ACC is basically a large open air radiator that dissipates heat to the atmosphere through air convection. Due to it being a dry cooling system rather than utilizing water, no visible plumes will be formed. However, the project will still result in the creation of thermal plumes which could result in a hazard to flight. Project materials note that a temperature rise less than 10°C (18°F) is anticipated for the ACCs. Based on the proposed fans utilized for the ACCs and the dimensions of the structure, a vertical velocity of 4.5 meters per second (m/s) is anticipated. The CEC utilizes a threshold of 4.3 m/s as a threshold of significance for the production of turbulence that could interfere with aircraft operation. The velocity of the plume typically decreases as it rises. In addition, as illustrated by project materials, none of the aircraft traffic pattern envelopes for the Blythe Airport take aircraft over the ACCs to be affected by the thermal plumes.

The project also proposes to have one auxiliary two-cell wet cooling tower for each of the four power blocks. This cooling tower would be utilized to cool waste heat from the auxiliary boiler during startup and other non-routine startup operations. No information was provided on how often, for how long, and what time of day these are to be used as well as the amount of temperature rise and velocity of the plumes to determine how these would affect aircraft operations. The materials noted that these were not of concern as hazards to flight during the CEC's analysis.

Open Area: Countywide land use compatibility criteria require that a minimum of 10% of land area in Airport Compatibility Zone D consist of open land as defined in Policy 4.2.4 of the ALUCP. Based on the materials submitted, it appears that the 10% requirement can be met. However, information has yet to be provided on the project's proposed developed area within Zone D and the area to qualify as open space to verify compliance with the open area requirements.

Part 77: Federal Aviation Administration obstruction evaluation review has commenced on the project. At the time of the submission of the application to ALUC, the FAA has issued Determination of No Hazard to Air Navigation letters for the two easterly ACCs (ACC-1 and ACC-4) and for 39 transmission poles. Additional information was requested by the FAA on 15 transmission poles which are pending FAA's clearance. FAA's Letters of Determination and Requests for Additional Information are attached to this staff report.

Noise: The site is located outside the area projected to be subject to average noise levels from aircraft operations in excess of 55 CNEL.

CONDITIONS:

1. The following uses shall be prohibited:
 - (a) Any use which would direct a steady light or flashing light of red, white, green, or amber colors associated with airport operations toward an aircraft engaged in an initial straight climb following takeoff or toward an aircraft engaged in a straight final approach toward a landing at an airport, other than an FAA-approved navigational signal light or visual approach slope indicator.
 - (b) Any use which would cause sunlight to be reflected towards an aircraft engaged in an initial straight climb following takeoff or towards an aircraft engaged in a straight final approach towards a landing at an airport.
 - (c) Any use which would generate smoke or water vapor or which would attract large concentrations of birds, or which may otherwise affect safe air navigation within the area.
 - (d) Any use which would generate electrical interference that may be detrimental to the operation of aircraft and/or aircraft instrumentation.
2. Any outdoor lighting installed shall be hooded and shielded to prevent either the spillage of lumens or reflection into the sky.
3. If the panels are mounted on a framework, said framework shall have a flat or matte finish so as to minimize reflection of sunlight.
4. In the event that any incidence of glare or electrical interference affecting the safety of air navigation occurs as a result of project operation, the permittee shall be required to take all measures necessary to eliminate such glare or interference.

COUNTY OF RIVERSIDE
AIRPORT LAND USE COMMISSION
STAFF REPORT

AGENDA ITEM: 3.1 3.4 4.4

HEARING DATE: April 8, 2010 (continued from February 11, 2010 and March 11, 2010)

CASE NUMBER: ZAP1005BL09 – US Solar Holdings, LLC
(Representative: Tanya Martinez)

APPROVING JURISDICTION: City of Blythe

JURISDICTION CASE NO.: CUP2009-01 (Conditional Use Permit)

MAJOR ISSUES: Federal Aviation Administration (FAA) review has not been completed. Reflectivity, glare, and electrical interference are among the concerns when renewable energy facilities are proposed in the vicinity of airports.

~~While it is likely that the project complies with open area requirements, staff cannot verify compliance without a more detailed site plan. Additional information is also requested regarding duration of construction, concentration of construction workers, and whether construction will occur at night.~~

RECOMMENDATION: ~~Staff recommends that the Commission authorize a letter requesting that a qualified engineer analyze the probability that the array would create a single beam of reflected light, project the properties of said beam, and plot its daily intersecting the aircraft traffic pattern. Staff recommends that the Commission open the public hearing, consider testimony, and CONTINUE this matter CONTINUANCE to the meeting of May 13, ~~April 8, March 11,~~ 2010, pending completion of the FAA obstruction evaluation review process and to allow further study as to whether the proposed project would constitute a hazard to flight.~~

~~Staff also requests that the Commission provide the applicant and staff with guidance as to its expectations for evidence demonstrating that the project will not be a hazard to flight.~~

~~submission of such additional information as is necessary to verify compliance with intensity limits and open area requirements.~~

PROJECT DESCRIPTION:

This is a proposal to construct and operate a 100 megawatt (MW) solar photovoltaic (PV) renewable energy facility (to be built in 20 MW phases) on 640 acres within an 829-acre area on the grounds of Blythe Airport. The area is labeled “non-aeronautical” on Exhibit 5 5C of the Blythe Airport Master Plan. The project will include maintenance enclosures not exceeding 25 feet in height.

PROJECT LOCATION:

The project site is located on the grounds of Blythe Airport, 750 feet easterly of the centerline of Runway 17-35 and 750 feet northerly of the centerline of Runway 8-26, in portions of Sections 20 and 29 of Township 6 South, Range 22 East. Blythe Airport is located northerly of Interstate 10 and Hobsonway and easterly of Mesa Drive, in unincorporated Riverside County.

LAND USE PLAN: 2004 Blythe Airport Land Use Compatibility Plan

- a. Airport Influence Area: Blythe Airport
- b. Land Use Policy: Airport Compatibility Zones C and D
- c. Noise Levels: Outside the 55 CNEL contour

BACKGROUND:

Land Use/Intensity: The project site is located within Compatibility Zones C and D of the Blythe Airport Influence Area. Land use compatibility criteria for Airport Compatibility Zone C allow up to 75 people per acre, while up to 100 people per acre are allowed within Airport Compatibility Zone D. Applicable limits for number of persons in any given acre are 150 in Airport Compatibility Zone C and 300 in Airport Compatibility Zone D. The applicant projects a maximum of 400 people on-site during construction; when considered in relation to an 86-acre phase, the average intensity would be less than five persons per acre. ~~Additional information has been requested regarding concentrations of construction workers in order to address the single acre intensity maximum.~~

In response to staff’s inquiry, the project representative advised that there would not be more than 80 persons within any given acre at any time, and that no construction would occur during nighttime hours.

Flight Hazard Issues: Lighting, glare, and electrical interference are among the issues that renewable energy facilities in the airport influence area must address. The applicant has stated that the proposed PV panels are designed to absorb and not reflect light, and that the proportion of light reflected under most circumstances would be 4%, compared to

7.7% for car windows. The applicant is proposing to use poly-crystalline solar panels that incorporate an “anti-reflective coating to increase conversion efficiency.”

In subsequent communications, the project representative advised that Suntech, the potential array supplier, has determined that the proportion of light reflected would be about 6%.

The project representative has further advised that there are no radio frequency emissions associated with the solar panels, which are designed to absorb sunlight and generate direct current (DC) electricity, which is then converted to alternating current (AC) electricity through the inverters.

At the February hearing, Commissioner Lyon inquired as to solar panel installations at other airports. He noted that the array at Fresno Yosemite Airport (FAT) is aligned with the runway and suggested contact with FAT Administration.

At the February hearing, A question was ~~has been~~ raised as to whether the array would have the potential to constitute a “coordinated source” generating “a beam of reflected light,” particularly in the early morning and late afternoon. We’ve all had the experience of having to drive facing west/southwest in the afternoon and had to deal with this situation, whether directly from the sun at a low angle in the sky or as reflected off the windows of automobiles traveling ahead of us. As drivers, we have the option of pulling over and stopping until the sun sets. That option is not available to a pilot, who can’t pull over other than by landing the aircraft.

At the February hearing, a Commissioner ~~has suggested~~ that “an engineer...generate a computer model of the beam of light and its daily arc intersecting the aircraft traffic pattern.” The Commissioner noted that the following properties of the beam would be calculable:

- size of the beam;**
- strength of the beam;**
- enlargement (dispersion) of the beam over distance;**
- height and width of the beam at any distance from its source;**

From these properties, the engineer would be able to identify the points where the arc from the tracking array would intersect the approach path and calculate: (a) the time of day that an approaching aircraft would have its view of the runway obscured from different portions of the traffic pattern; (b) the length of time that the beam would take to pass into, through, and out of the point of intersection; and (c) the length of time that the beam would obscure the runway from any given point of the approach.

A less quantitative approach would be to request that a disinterested observer (such as a pilot with the Civil Air Patrol) fly over a solar array using similar technology

and provide input with regard to glare and reflectivity issues, as well as other issues such as air disturbance and “heat rise.”

At the March hearing, a clear list of information was requested of the applicant by the Commissioners. Following are the requested items:

RFI - measurements of the signature and distance of the signal produced by the inverters

Reflectivity - Preparation of a study or analysis showing where reflection is directed to and amount of light/reflection created in accordance with the letter from Caltrans Aeronautics. Primary impact location is where the light/reflection intercepts the standard approach path.

Location on Airport - Clarify whether any portion of the project is within Zone A. No portion should be located within Zone A

Transmission Line Alignment – Option C (Riverside Ave – Burke – Hobsonway) or undergrounding of the line were desired by the Commission

Ground Fault Hazards - Information on the potential hazards of the DC current from a potential airplane crash on the site. Consideration should be given to both electrocution and to fire hazards created from an airplane fuel spill and ignition by electricity/sparks.

At the March hearing, concerns were also raised regarding the proximity of the project to the airport and the potential for airplanes to run off the runway and into the project’s perimeter fence. This concern was diminished by noting that the chain link fence would be safer for an airplane to crash into than most other structures or features.

Since the March hearing, the applicant’s representative was provided the above list of information requested and no additional information has been received as of the writing of this staff report.

Open Area: Countywide land use compatibility criteria require that a minimum of 20% of land area in Airport Compatibility Zone C and 10% of land area in Airport Compatibility Zone D consist of open land as defined in Policy 4.2.4 of the ALUCP. The project will occupy 640 acres of an 829-acre area, so it would appear that up to 189 acres of the 829-acre area, or 22.8 percent of the larger area, would remain open. However, additional information (a more detailed site plan delineating open areas and a confirmation from the airport operator and/or Riverside County EDA as property owner representative that there are no plans for the remainder of the larger area) is needed to verify compliance with the open area requirements.

Provided that there are no structures or obstructions within the open rectangles on the site plan, the project clearly meets the requirement for a minimum of ten percent open area in Compatibility Zone D. The project representative has indicated that 27 percent of land area within Compatibility Zone C will be open area, but the format of the exhibit does not facilitate verification.

Part 77: Federal Aviation Administration obstruction evaluation review is required, because the project is proposed on airport grounds. **The project is presently being evaluated by the Federal Aviation Administration through** ~~The applicant has indicated that the Federal Aviation Administration has assigned~~ Aeronautical Study Nos. 2010-AWP-150-NRA and 2010-AWP-196-NRA through 2010-AWP-216-NRA, all of which are currently being studied. Aeronautical Study Nos. 2010-AWP-196-NRA through 2010-AWP-199-NRA address the solar array (with a maximum height of ten feet above ground level), while 2010-AWP-200-NRA through 2010-AWP-216-NRA address the transmission line poles (with a maximum height of nineteen feet above ground level). ~~to this project.~~

While the Commission has been willing to grant findings of conditional consistency in situations where an off-airport land use is undergoing obstruction evaluation, as an on-airport land use, staff would recommend that the FAA finding of no hazard to air navigation be a prerequisite to a finding of consistency in this situation.

Noise: The site is located outside the area projected to be subject to average noise levels from aircraft operations in excess of 55 CNEL.

CONDITIONS:

1. The following uses shall be prohibited:
 - (a) Any use which would direct a steady light or flashing light of red, white, green, or amber colors associated with airport operations toward an aircraft engaged in an initial straight climb following takeoff or toward an aircraft engaged in a straight final approach toward a landing at an airport, other than an FAA-approved navigational signal light or visual approach slope indicator.
 - (b) Any use which would cause sunlight to be reflected towards an aircraft engaged in an initial straight climb following takeoff or towards an aircraft engaged in a straight final approach towards a landing at an airport.
 - (c) Any use which would generate smoke or water vapor or which would attract large concentrations of birds, or which may otherwise affect safe air navigation within the area.
 - (d) Any use which would generate electrical interference that may be detrimental to the operation of aircraft and/or aircraft instrumentation.

2. Any outdoor lighting installed shall be hooded and shielded to prevent either the spillage of lumens or reflection into the sky.
3. If the panels are mounted on a framework, said framework shall have a flat or matte finish so as to minimize reflection of sunlight.
4. In the event that any incidence of glare or electrical interference affecting the safety of air navigation occurs as a result of project operation, the permittee shall be required to take all measures necessary to eliminate such glare or interference.
5. Any new electrical transmission and distribution lines for this project shall be located outside the boundaries of the Runway Protection Zone (a minimum of 2,500 feet easterly of the easterly terminus of Runway 8-26).