

DOCKET 07-AFC-6

DATE	<u>JUN 15 2010</u>
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June 16, 2010

California Energy Commission
Docket Unit
1516 Ninth Street
Sacramento, CA 95814-5512

Subject: **BSPP RESPONSE TO ALUC COMMENTS OF MARCH 22, 2010 ON ALUC APPLICATION AND SUBSEQUENT CORRESPONDENCE BY EMAIL ON APRIL 13, 2010**
BSPP RESPONSE TO ALUC COMMISSION COMMENTS FROM MAY 13, 2010 COMMISSION MEETING
DOCKET NO. (09-AFC-6)

Enclosed for filing with the California Energy Commission are 1) BSPP Response to ALUC Comments of March 22, 2010 and Subsequent Correspondence by Email on April 13, 2010, and 2) BSPP Response to ALUC Commission Comments from May 13, 2010 Commission Meeting for the Blythe Solar Power Project (09-AFC-6).

Sincerely,



Arrie Bachrach

BLYTHE SOLAR POWER PROJECT (09-AFC-6) RESPONSE TO ALUC COMMISSION COMMENTS FROM MAY 13, 2010 COMMISSION MEETING	
Page 1	Response Date: May 27, 2010

SUMMARY

The Blythe Solar Power Project (BSPP) does not add any hindrances to aircraft operations, reduce operational flexibility, or cause any cumulative impacts on aviation safety at Blythe Airport. The impacts of the Project on aircraft operations at the Blythe Airport are negligible and generally occur outside the Airport Influence Area (AIA). The minor impacts that are expected to occur within the AIA are limited to weak visible glow from the mirror arrays and the relocated GenTie line that crosses Compatibility Zone C approximately 6,100 ft from the end of the future extension of Runway 26. Due to the physical separation of the BSPP from other potential sources of impacts on aviation in the vicinity of the Blythe Airport, there will be no interaction between the negligible impacts that the BSPP will produce and the impacts produced by the other sources in the area.

- The Applicant has demonstrated, in prior submittals, testimony, and this response to comments, that glint and reflections from the solar mirror arrays will not produce a significant distraction to a pilot during the critical approach phase to Runways 17 or 26.
- The Air Cooled Condensers (ACCs) and auxiliary cooling towers proposed for the project are outside the AIA.
- A Notice to Airman (NOTAM) advising avoidance of overflight of project structures will not hinder airport operations since the project's ACCs are well outside the normal traffic pattern for the airport.
- Even if a pilot were to overfly the ACC thermal plume, the affect on aircraft flight stability is not expected to be significant and will likely be less than that produced by daily convective thermals in the vicinity of the airport.
- Radio Frequency Interference (RFI) on airport communication and navigation systems is projected to be negligible due to operation of the Project and its power lines.
- The open space with Compatibility Zone D will be approximately 94 percent, greatly exceeding the ALUC minimum open space in Zone D of 10 percent.
- The Applicant has move the GenTie line outside of Compatibility Zone B1 to meet ALUC concerns.
- All power poles associated with the project will meet ALUC height limitation within the AIA and will meet Federal Aviation Administration (FAA) requirements.
- If requested by the Commission, the Applicant will install visibility marker balls on the shield wires for that portion of the GenTie Power line located within ALUC Zone C.

COMMENTS AND APPLICANT RESPONSES

Comment 1:

Please provide a topographic map showing the terrain in the vicinity of the Blythe Solar Power Project (BSPP) and the revised Generation Tie (GenTie) transmission line route to the Southern California Edison (SCE) substation.

**BLYTHE SOLAR POWER PROJECT (09-AFC-6)
RESPONSE TO ALUC COMMISSION COMMENTS
FROM MAY 13, 2010 COMMISSION MEETING**

Page 2

Response Date: May 27, 2010

Response:

Two topographic figures were prepared that show the terrain in the vicinity of the proposed BSPP and revised GenTie route. Figure 1 is a topographic map showing terrain contours in relation to the facility right of way (ROW) and the revised GenTie route. Figure 2 is an approximate pilot view of an approach to Runway 26 consisting of a pseudo 3-dimensional plot of terrain elevations, overlaid with the airport compatibility zones, the project ROW, and the revised GenTie route.

Comment 2:

Confirm the closeout of the open-space issue in Zone D.

Response:

The Applicant understands that the issue of the amount of open space in that portion of the project within Compatibility Zone D had been addressed to the satisfaction of the Commission Staff. To reiterate, that portion of the disturbed project within the Airport Influence Area Zone D where solar mirrors will be located comprises 31.6 acres, or 5.6 percent of the total project area within Zone D. Thus, the open space within Zone D is 94.4 percent, compared with the open space required by the ALUC of at least 10 percent. Figure 3 below presents a plot of the BSPP open space and built space within the area defined as Zone D.

Comment 3:

Status of Federal Aviation Administration (FAA) revised submittals.

Response:

The applicant submitted FAA Form 7460 applications for the new GenTie poles on May 12. Forms for each new pole were received by the FAA and a case number was assigned to each application, and the review is in progress. Upon submittal of the new applications, the Applicant withdrew previous, obsolete GenTie pole applications. Applications in process and complete for those poles and structures on the proposed facility that would remain unchanged with the new GenTie route were left in place. The Applicant has requested expedited processing of the new GenTie route pole applications but did not receive confirmation from the FAA that such expedited processing would take place. Therefore, we suspect that the new applications will be processed in normal order by FAA staff. However, the review by FAA staff should be simplified as the poles in Compatibility Zone B1 have been moved, along with some of the poles in Zone C. To reiterate information presented at the May 13 Commission meeting, all poles within Zone C will be 70 ft high, all poles in Zone D will be 90 ft high, and the remaining poles in Zone E and beyond (with two exceptions) will be 145 ft high (See Figure 4 below). The two exceptions are at the boundary between Zone D and Zone E. To prevent line ground clearance from falling below acceptable limits during the transition from 90 ft poles to 145 ft poles, the first pole in Zone E at the two transition points will have an intermediate height of 115 ft. See Attachment 1 for documentation of the status of the ongoing FAA review.

Comment 4:

Please supply a figure of the proposed right hand pattern for Runway 26 and the potential for the Blythe II Notice to Airmen (NOTAM)/mitigation to cause pilots to overfly an Air Cooled Condenser on the project site.

**BLYTHE SOLAR POWER PROJECT (09-AFC-6)
RESPONSE TO ALUC COMMISSION COMMENTS
FROM MAY 13, 2010 COMMISSION MEETING**

Page 3

Response Date: May 27, 2010

Response:

The Riverside County Airport Land Use Compatibility Plan, Volume 3 Blythe Airport, Exhibit BL-7, contains a drawing of the estimated limits of the traffic pattern at the Blythe Airport. The exhibit reflects the 80th percentile file profile in that 80 percent of all traffic is expected to occur within the delineated bounds for the pattern. To approximate the 80th percentile for a right hand traffic pattern, a mirror image of the left hand pattern was created and placed on top of the Compatibility Plan figure. This new plot is presented in Figure 5. It is clear from the plot that the ACC-4 is well outside the traffic pattern. By scaling from the figure, the ACC-4 is approximately 10,400 feet from the outer edge of the right hand traffic pattern at its nearest point, and 24,400 feet from the inner edge of the left hand pattern. Therefore, the potential NOTAM/mitigation for the Blythe II project resulting in a right hand turn pattern for Runway 26 will not cause pilots to overfly the ACC-4. Because the existing and proposed future traffic patterns for the Blythe Airport do not take pilots near any of the project's ACCs, the only way any pilot would fly over an ACC is if the pilot directed the aircraft to purposely fly over the ACC. For pilots following the normal patterns, BSPP does not have an impact on the airport operations.

Comment 5:

Please determine whether it would be possible and – if so, at what times of day and seasons of the year – for reflection, glint, or glare from any element of the solar array to intersect Runway 26 or its centerline extended easterly at a height of 1000 feet or less above ground level. Presumably, this would be most likely to occur on the summer solstice, but you may need to check other dates if Snell's Law results in this having a greater probability of occurring at other times. The concern is the potential for a flash or beam of light that would affect a pilot on a final approach to a landing on that runway (coming from east and making a westbound landing).

Response:

As presented at the ALUC meeting on May 13, the glint from a solar array mirror will occur on the normal to the Heat Conduction Element (HCE) tubes. As the Blythe Airport is to the southeast of the closest mirror array, a pilot approaching Runway 26 at 1,000 ft or lower would not be on the normal to any of the HCE tubes. The variation in the sun azimuth and elevation angles during the year would be insufficient to produce the required alignment the pilot on final approach, the normal to an HCE tube, and the sun. Consequently, there is no potential for direct glint from the normal to the HCE tube to impact the pilot. The analysis of the scenario dealing with off-normality incidence of the sun's light with respect to the HCE tube, as postulated by the Commission, is presented below. This additional postulated glint scenario will not produce glint or reflection that could be viewed by a pilot below 1,000 ft on approach to Runway 26.

Postulated Scenario:

The sun is reflecting at a glancing angle off the side of a joint in the HCE tube and is reflected to a pilot on final approach to Runway 26 at an altitude of 1,000 ft or less. The sun is at its most northern extent at sunrise on the summer solstice (June 21), which would maximize the geometric potential for a pilot to be exposed to the postulated glint/reflection along the intended flight path.

Scenario Geometry:

As previously demonstrated to the Commission in the May 13 Commission meeting, only a tiny fraction of the sunlight impinging on the parabolic trough mirrors escapes capture by the HCE tube and thus there is

**BLYTHE SOLAR POWER PROJECT (09-AFC-6)
RESPONSE TO ALUC COMMISSION COMMENTS
FROM MAY 13, 2010 COMMISSION MEETING**

Page 4

Response Date: May 27, 2010

no direct reflection of the sunlight from the mirror surface involved in this postulated scenario. The postulated reflection will occur off of the metallic joints in the HCE tube and reflection by the glass surface. Due to curvature in the joint and HCE tube, only a small portion of the surface will be involved in the reflection to a given viewpoint. According to Snell's law, the incident and reflected light must be in the same plane and form equal angles with respect to the normal to the HCE tube (due east, or 90° azimuth because of the north-south alignment of the HCE tubes). The summer solstice will produce the worst-case geometry because the sun is at its northern most extent on the solstice, which will maximize the incident and reflected angle with respect to the normal, thereby maximizing the area in which the postulated reflection could potentially be seen. Figure 6 provides a plan view of the postulated reflection scenario while Figure 7 presents a side view.

Analysis:

Two conditions must be satisfied for a pilot on approach to Runway 26 at any altitude to observe the postulated reflected ray.

1. Condition 1 addresses the reflection of a ray from an HCE tube projected on a horizontal surface, and if this projected ray crosses the approach to Runway 26. Only if this projected ray crosses the approach would the reflection be potentially visible. This is a necessary but not sufficient condition for a pilot to observe glint.
2. Condition 2 addresses the elevation angle of the reflected ray, and if the elevation angle is sufficient to allow the pilot to intercept the reflected ray at the given altitude. Again this is a necessary, but not sufficient condition. Both Conditions 1 and 2 must be met for the proposed scenario to produce glint observable by a pilot.

At 6:00 AM PDT on June 21, the solar elevation angle (θ) above the horizon is 5 degrees and the solar azimuth (measured clockwise from north) is 65°. Snell's law requires the reflected light to form the same angle with the normal to the tube (directed on an azimuth of 90°, or due east). For a 65° incident azimuth, the reflected ray will be at an azimuth of 155°. Thus, a bearing 180° opposite the reflected ray, or 335° from the pilot's viewpoint, would be the view bearing along which the glint would be observable (Figure 6). As the sun's azimuth moves south in advance of or past the summer solstice, the reflected ray will decrease from an azimuth of 155° near sunrise on the solstice to an azimuth of 90° at the equinox on either side of the solstice. For a given sun elevation and azimuth angle, a series of potential reflection points occur along the view bearing opposite of the azimuth of the reflected ray, corresponding to each mirror trough along the bearing. However, the intensity of each succeeding reflection along the view bearing will decrease as the square of the distance from the pilot. Thus, only the nearest reflection points need to be considered.

The required solar geometry for the reflected ray to cross the approach to Runway 26 occurs for about ten weeks near sunrise on either side of the summer solstice (June 21). As the temporal distance from the solstice increases, the angle at which the reflection occurs becomes more acute, and eventually the horizontal projection of the reflected ray does not cross the flight path of a pilot on approach to the airport. Similar, but mirror image, geometry will occur on either side of the winter solstice (December 22), with the solar azimuth at approximately 120° at sunrise on the winter solstice. However, near the winter solstice, any such reflections will be from the pilot's back or side on approach to Runway 26.

Snell's Law, in addition to requiring equal incidence and reflection angles with respect to the normal, requires the reflected light to be coplanar with the incident light. This requirement means that on the summer solstice with a sunlight incidence angle of 5° above the horizon, the reflected ray will have a

**BLYTHE SOLAR POWER PROJECT (09-AFC-6)
RESPONSE TO ALUC COMMISSION COMMENTS
FROM MAY 13, 2010 COMMISSION MEETING**

Page 5

Response Date: May 27, 2010

departure angle of 5° below horizontal. The azimuth of the reflected ray will be 65° south of the normal (east), or on an azimuth of 155° . As the HCE tube will be approximately 30 ft above the ground at its maximum (the actual height varies with the orientation of the mirror), trigonometry indicates that the reflected ray will strike the ground approximately 350 ft from the reflection point, measured along the HCE tube. See Figure 7. As the reflected ray is directed at a projected horizontal angle of 65° from the HCE tube in a downward direction, the reflected ray will most likely be intercepted by the adjoining parabolic mirror support structure before it can reach the ground. As the sun rises during the day, the solar elevation angle will increase, as will the reflection angle below the horizontal. Beyond a certain solar elevation (and resultant solar azimuth), it would not be possible for the horizontal projection of the ray to cross the path of the pilot in the pattern on final approach due to Snell's Law.

Conclusion:

The postulated scenario of glint impacting a pilot on final approach to Runway 26 cannot happen because all such postulated reflections will be directed downward to the ground and would not leave the project boundary

Comment 6:

Please provide additional documentation as to the potential for cumulative impacts on airport operations and flight safety at the Blythe Airport due to operation of the proposed project.

Response:

The Applicant has demonstrated that the concerns expressed by the CEC in its Comment Letter dated March 22, 2010, and in subsequent comments and questions, that the Project does not produce a significant impact on flight operations and safety at the Blythe Airport. This demonstration of less than significant impact was made in the following material submitted by the Applicant to the ALUC:

1. Original ALUC application (submitted to the ALUC on February 25, 2010),
2. Response and design changes to ALUC staff and Commission Member comments on that application (submitted to the ALUC on May 4),
3. Presentation given at the ALUC 13 Commission meeting, and
4. These response to comments from the May 13 Commission meeting.

Table 1 lists the concerns identified by the ALUC Commission and staff and a summary of the reasons for the lack of significance of each concern, as demonstrated by the Applicant in its submittals and presentation.

**BLYTHE SOLAR POWER PROJECT (09-AFC-6)
 RESPONSE TO ALUC COMMISSION COMMENTS
 FROM MAY 13, 2010 COMMISSION MEETING**

Table 1. Review of Potential Cumulative Impact Issues

Concern	Resolution
Height of structures	Forms 7460 have been submitted for FAA review for all structures associated with the project that require FAA review. The Applicant has moved the GenTie line outside of Compatibility Zone B1 and pole heights have been lowered in Zone C. All Project Air Cooled Condensers (ACCs) and auxiliary cooling towers will be located outside the Airport Influence Area boundary. Therefore, all issues dealing with structure height within the Airport Influence Area have been addressed and mitigated.
Radio Frequency Interference	Radio frequency interference (RFI) from project sources on airport navigation and communication signals were demonstrated to be negligible, including from corona discharge from transmission line insulators.
Reflectivity and Glare	The applicant demonstrated in its submittals and during the presentation at the May 13 Commission meeting that direct reflection of the sun from the solar trough parabolic mirrors does not occur. From the geometry of optics, direct reflection from the HCE tubes will occur in a direction normal to the tubes (i.e., to the east and west) and will not be visible from the airport. Glancing reflection of the sun along the length of the HCE tube, if it occurs, will be directed towards the ground and will not be visible outside the boundary of the facility. Glint from HCE tube connectors will be small in intensity, instantaneous in duration, and subject to very precise geometrical constraints that would potentially affect a very limited number of flight operations.
Thermal Plumes	The threat to aircraft flight stability posed by the ACC-4 is very small. The airport traffic pattern, even with a right hand turn pattern on Runway 26, will be at least 10,400 ft away from ACC-4. The modeling analysis performed by the California Energy Commission indicating potential hazard to flight safety above an ACC was demonstrated by the Applicant to be based on flawed assumptions and modeling techniques. In addition, physical reasoning and screening calculations demonstrate that the source of thermal energy density within an ACC does not exist at levels that would produce severe turbulence. In summary, traffic at the airport will not be directed over ACC-4, and any stray aircraft that may pass over ACC-4 is highly unlikely to be exposed to conditions that lead to flight safety issues. Thus, thermal plumes from the facility will have a less than significant impact on flight safety at the Blythe Airport. If the CEC was to require a NOTAM directing pilots to avoid overflight of the ACC-4, although unnecessary, the NOTAM will not contribute to a cumulative impact to airport operations because as identified in Response to Comment 4, no pilot must fly over ACC-4 to use either Runway for landing. Therefore, the only pilots that could be potentially affected are those that wish to fly directly over the ACC-4
Open Space with Zone D	The disturbed portion of the project with solar mirror construction within the Airport Influence Area Zone D comprises 31.6 acres, or approximately 6 percent of the total project area within Zone D. Open space of the project within Zone D is therefore approximately 94 percent, and is well above the allowable minimum criteria of 10 percent established by the ALUC.

**BLYTHE SOLAR POWER PROJECT (09-AFC-6)
RESPONSE TO ALUC COMMISSION COMMENTS
FROM MAY 13, 2010 COMMISSION MEETING**

Page 7

Response Date: May 27, 2010

Table 1. Review of Potential Cumulative Impact Issues (continued)

Cumulative Impacts	<p>A cumulative impact due to a project can occur if:</p> <ol style="list-style-type: none">1. If the project alone has a significant impact absent any other impacts from other sources, or2. Contributes, even if not at a significant level, to an impact at a remote location where another source is producing an impact. <p>Because all the potential hazards posed by the Project identified by ALUC Commission and staff are less than significant or have been mitigated to less than significance, there is no cumulative impact of the project under criteria 1.</p> <p>To address criteria 2 for cumulative impact, the impacts of the proposed facility are limited to the area immediately adjacent to the project (i.e., ACC thermal plumes), and/or are very insignificant/negligible at locations away from the project (i.e., glint, radio frequency interference, etc).</p> <p>Because there is no plausible interaction of project negligible impacts with impacts of a more significant nature from other cumulative sources, the project does not contribute to a cumulative significant impacts on aircraft operations or flight safety at the Blythe Airport</p>
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Comment 7:

Please provide additional information on alternative project locations considered by the Applicant.

Response:

Please refer to Attachment 2.

Comment 8:

Please provide additional information on alternative project sizes considered by the Applicant.

Response:

Please refer to Attachment 2, Data Request DR-ALT-44, page Alt-20, that deals with alternative project sizes.

Comment 9:

Please address the issue of installation of visibility marker balls for that portion of the GenTie power lines that crosses extended Runway 26.

**BLYTHE SOLAR POWER PROJECT (09-AFC-6)
RESPONSE TO ALUC COMMISSION COMMENTS
FROM MAY 13, 2010 COMMISSION MEETING**

Page 8

Response Date: May 27, 2010

Response:

If the Commission so requests, the Applicant will install visibility marker balls on the shield wires for that portion of the GenTie Power line located within ALUC Zone C.

Comment 10:

Please provide an update on those studies commissioned by the CEC and discuss the availability of the results of those studies for use by the Commission in its deliberation.

Response:

According to Alan Solomon, CEC Project Manager assigned to BSPP, the CEC staff has commissioned the following studies that will be available to the ALUC and public on June 30, 2010:

1. A pilot who has performed previous overflights of the SEGS facility will prepare written documentation of his observations of glint from solar trough mirror arrays
2. CEC staff will prepare a discussion on gen-tie zoning and safety issues
3. CEC staff will conduct a revised analysis of thermal plumes from ACCs.

The CEC decided not to proceed with a flyover of the ACC located at the Sutter power plant in California. As a result, the Applicant has separately commissioned a flyover of the ACC at the Nevada Power Walter E. Higgins Power Plant in Primm, Nevada. This plant was selected since it is most representative of conditions expected at the proposed BSPP as it is located in the desert, it has an ACC of the same general design, and is of approximate, but somewhat, smaller size than those proposed at BSPP. Both the Higgins ACC and the proposed BSPP ACCs were/will be manufactured by SPX. The Higgins plant ACC is a 40-cell ACC with a fan rating of 200 hp each. The proposed BSPP ACC has 45 cells with a fan rating of 250 hp each. Dimensionally, the two ACCs are roughly comparable. The fans at Higgins are arranged in two adjoining 4x5 blocks while those proposed at the BSPP are arranged in a single 5x9 block. It should be noted that ACC fans are operated at a constant speed to keep a constant airflow across the heat exchanger unit. If condensing load is reduced, rather than reducing flow across the entire ACC, individual fan modules will be taken off line. Thus, as load on the power plant changes, the effective size of the ACC is reduced but the airflow above an operating section is not changed.

The flyover is planned for Wednesday, June 2, 2010, subject to acceptable low wind conditions. The pilot will be Mr. Douglas Moss. Mr. Howard Balentine, consultant to Applicant, will be an observer. Douglas Moss' C.V. and qualifications are attached in Attachment 3. Mr. Moss will be present at the ALUC hearing on June 10th to discuss results of this flyover, previous flyovers of cooling tower plumes, and personal observations as a pilot with potential glint from a solar trough mirror array.

Comment 11:

The Commission expressed interest in getting input from the local community, the City of Blythe (the operator of the Blythe Airport), and local pilots that use the airport.

**BLYTHE SOLAR POWER PROJECT (09-AFC-6)
RESPONSE TO ALUC COMMISSION COMMENTS
FROM MAY 13, 2010 COMMISSION MEETING**

Page 9

Response Date: May 27, 2010

Response:

Please See Attachment 4 for letters of support from local pilots that use the Blythe Airport. No comments are available from the City of Blythe.

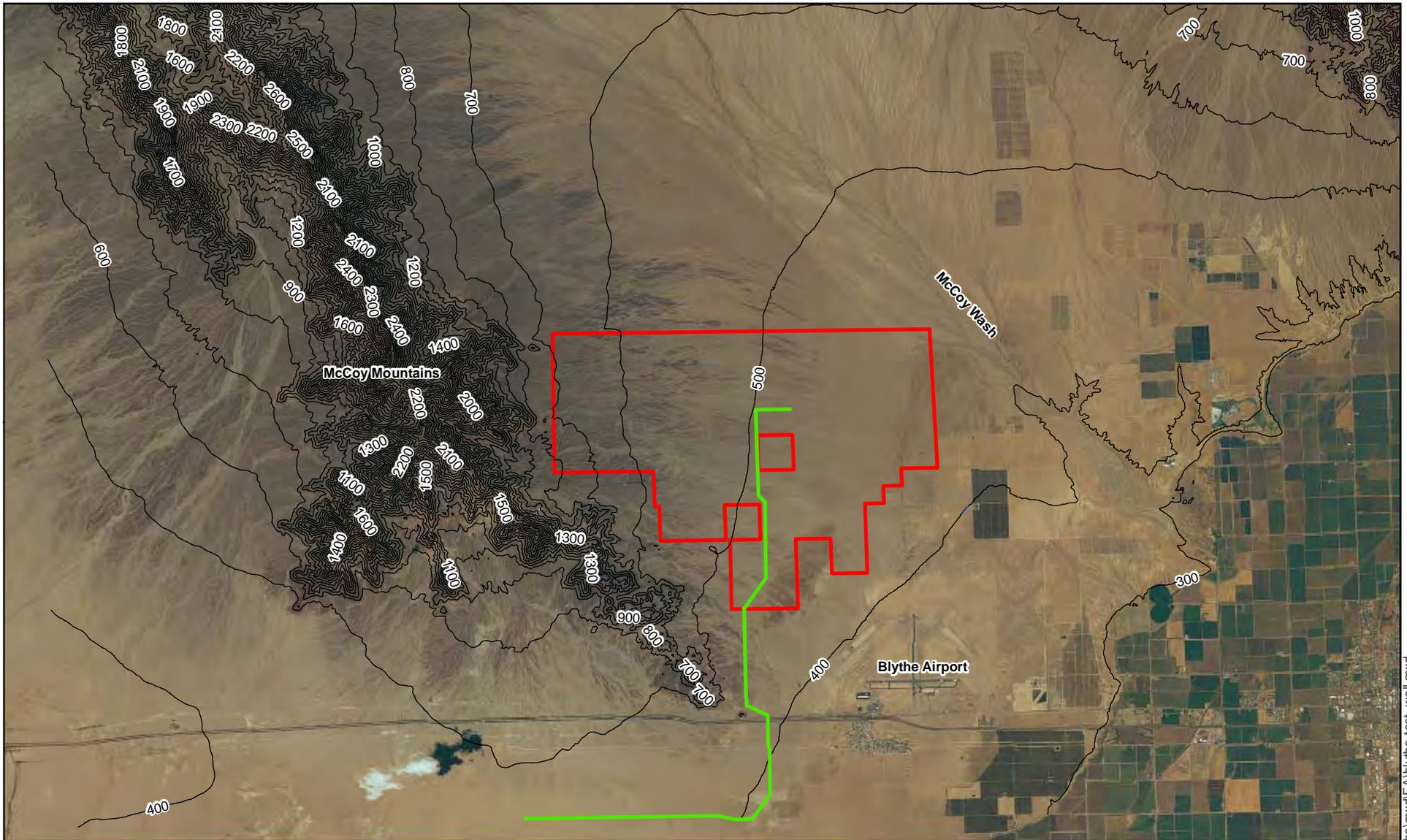
Comment 12:

Evaluate the potential for visible plumes and thermal plumes from the wet cell cooling tower backup system. Address the potential for moderate turbulence resulting from peak velocity flows, which could be up to twice the average velocity, or explain why this would not occur. (Would the peak velocity only occur at very low heights directly over the unit?)

Response:

In our response of to the ALUC staff comment letter, we provided information that demonstrated that the small auxiliary cooling tower is not a hazard to aviation. We reiterate four reasons for concluding that the four auxiliary cooling towers proposed for the BSPP do not constitute a potential hazard to aviation.

1. The auxiliary cooling tower is much smaller than the Blythe Energy Project I (BEP I) cooling tower, serves a completely different function, and operates under a much reduced load. The visible and thermal plumes above such a cooling tower have a much smaller footprint and impact than that from the much larger steam cycle cooling tower at BEP I. While no visible plume or thermal plume modeling was performed for these auxiliary cooling towers, it is the informed opinion of the Applicant's Consultant, a consultant with a long history of performing visible and thermal plume modeling of wet cooling towers, that the potential for a hazard to aviation from these four small cooling towers is negligible.
2. All four auxiliary cooling towers proposed for the Project will be located outside of the Airport Influence Area (AIA) boundary. Any small visible or thermal plumes that may form are highly unlikely to reach the AIA boundary.
3. The auxiliary cooling towers are located near the ACC, and under most circumstances, the plume from the auxiliary cooling tower will not extend above the top of the nearby ACC. An aircraft would have to be overflying the power block at very low altitude to be affected by a potential plume from the auxiliary cooling tower and would be at much more risk from collision with power block structures such as power poles and ACCs than from any plume from the cooling tower.
4. The CEC, in their review of the Applicant's Application for Certification, and in their Data Requests based on the AFC, did not address impacts from the small auxiliary cooling towers. In fact, these cooling towers are not even mentioned in the Traffic and Transportation section of the Staff Assessment.



- Legend**
- Project Right-of-Way
 - Proposed Transmission Line Route

Data Sources:
 Air Photo, California Spatial Information Library,
 NAIP, 2009 Riverside County



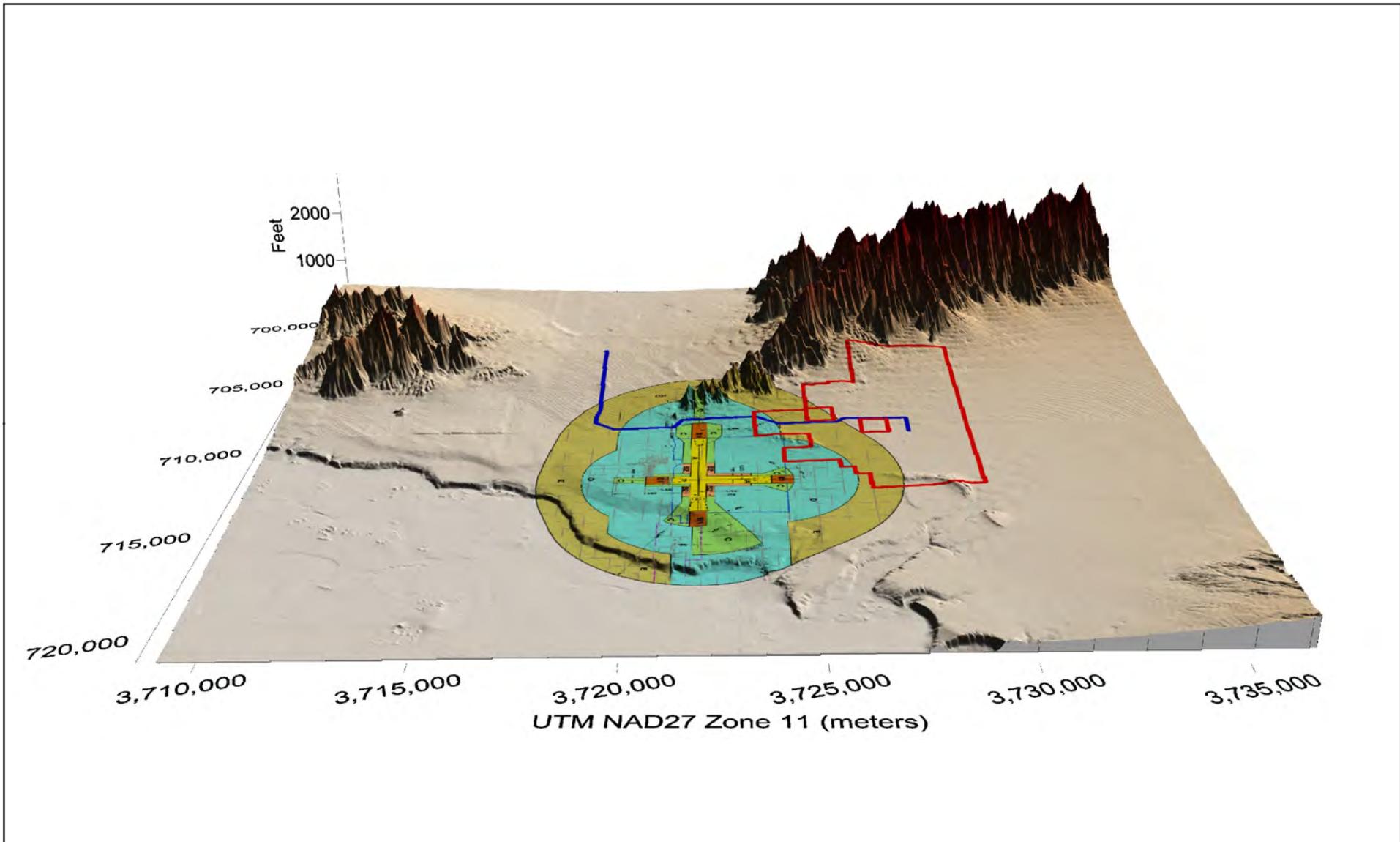
Blythe Solar Power Project

**Figure 1
 Topography**

Palo Verde I, LLC



Project: 60139695-5460
 Date: May 2010



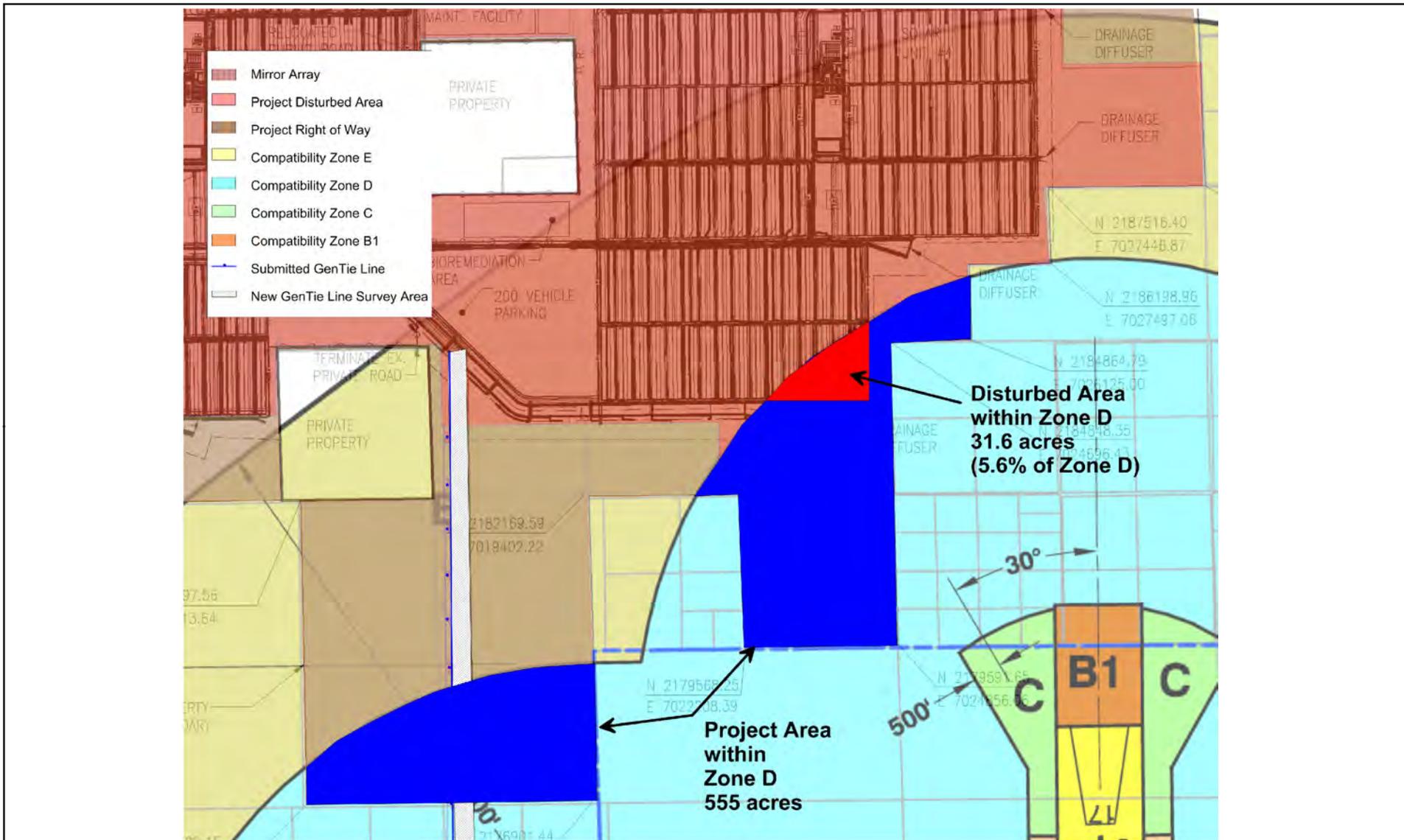
Blythe Solar Power Project

Figure 2
Elevation View of Airport
Compatibility Zones,
BSPP Site, GenTie Line
and McCoy Mountains,
Looking West

Palo Verde I, LLC

AECOM

Project: 60139695-5460
Date: May 2010



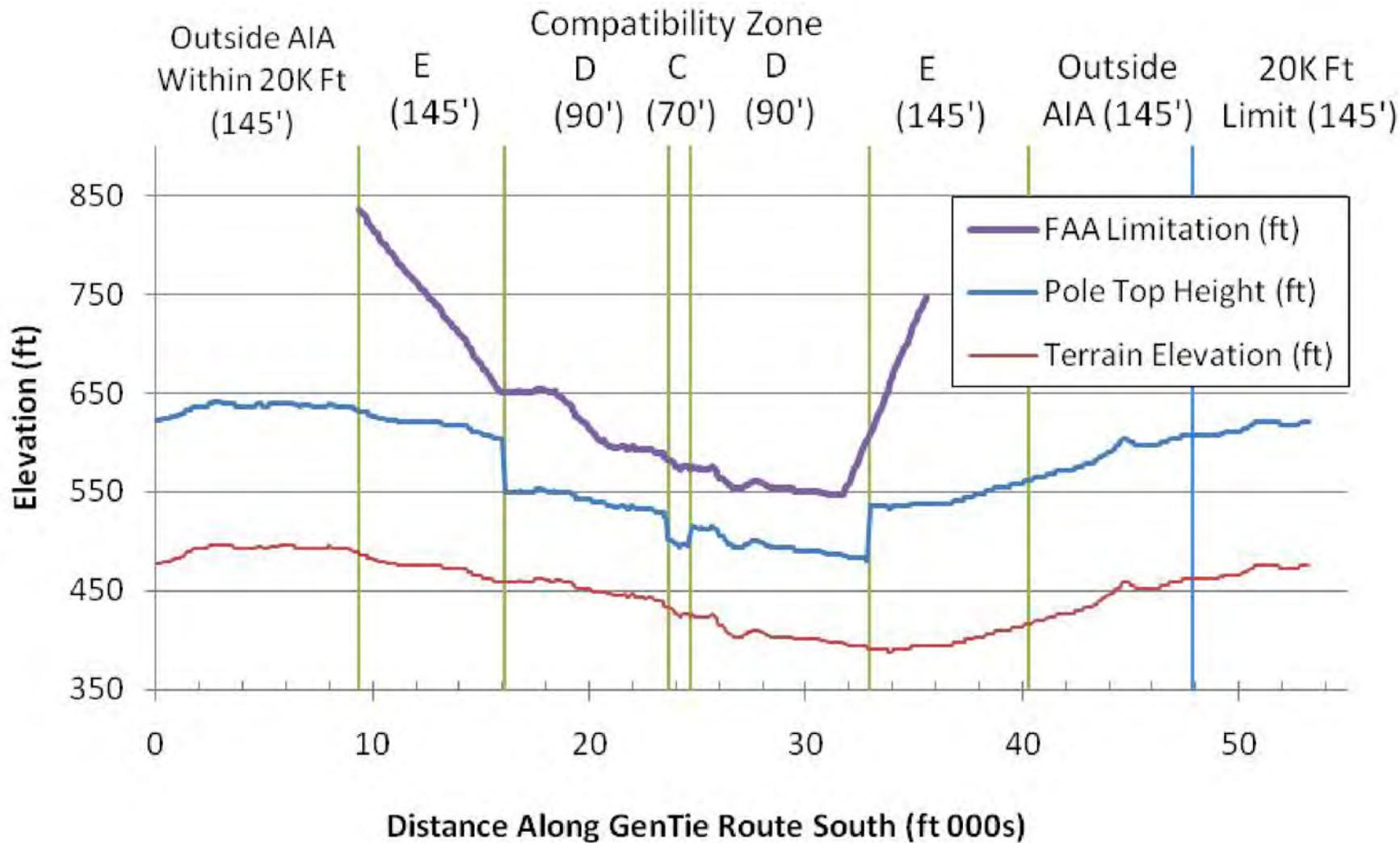
Blythe Solar Power Project

Palo Verde I, LLC

Figure 3
Project Disturbed and
Open Space in Zone D

AECOM

Project: 60139695-5460
Date: May 2010



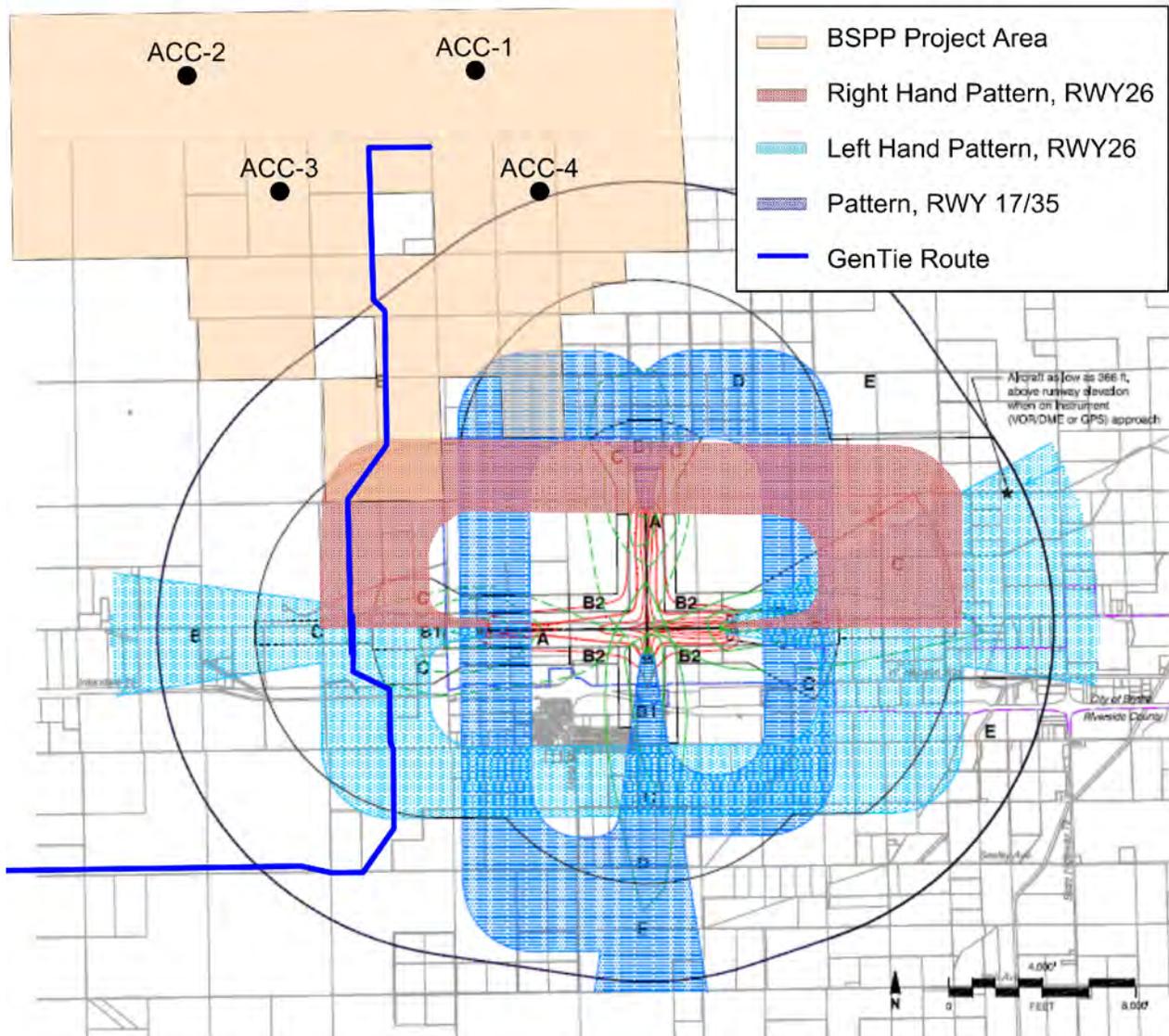
Blythe Solar Power Project

Palo Verde I, LLC

Figure 4
Pole Elevations and
Compliance with ALUC
Compatibility Zones

AECOM

Project: 60139695-5460
 Date: May 2010



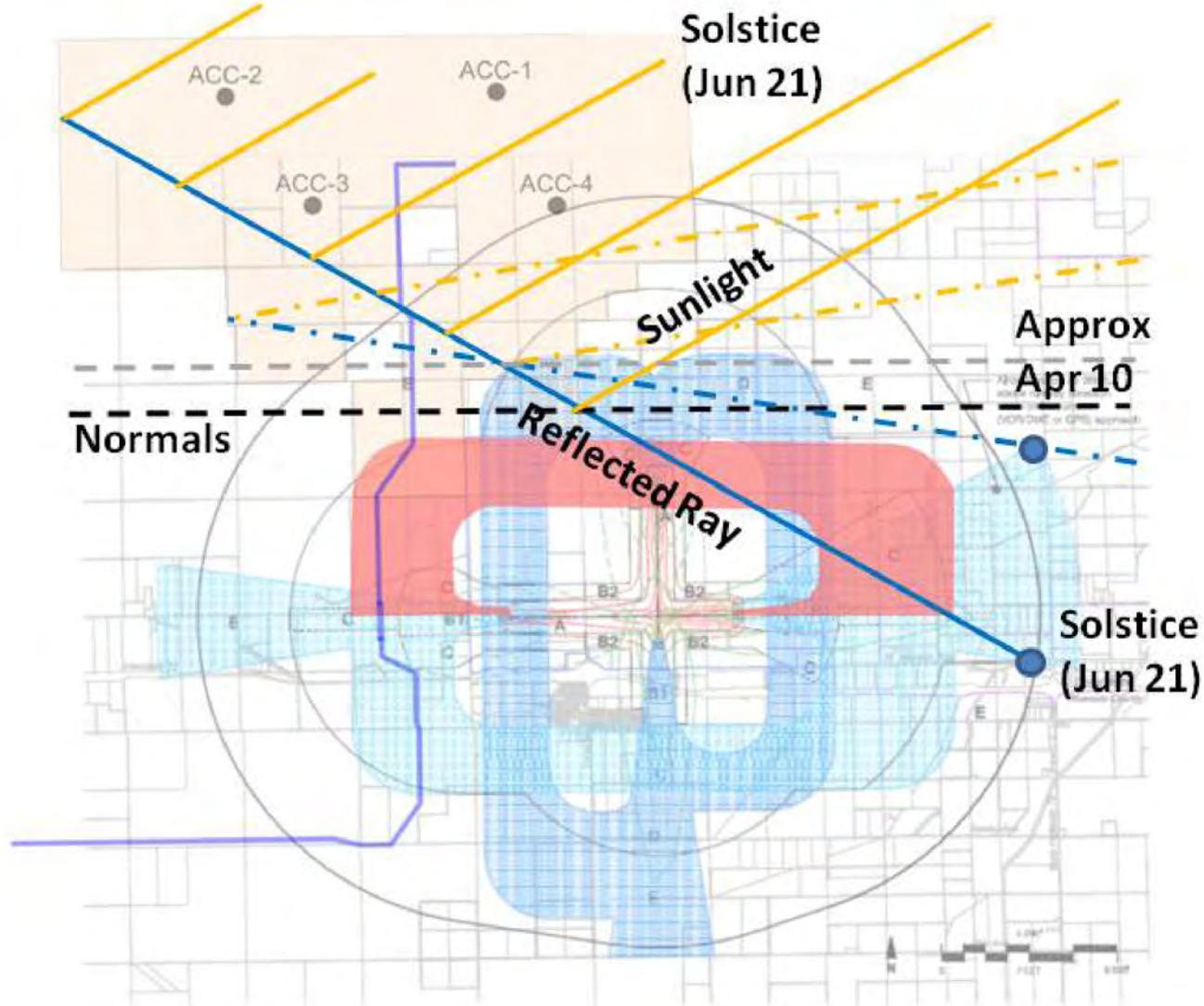
Blythe Solar Power Project

Figure 5
Blythe Airport Estimated
Future Right Hand Turn Pattern
for Runway 26
(Approximately 80% of Traffic)

Palo Verde I, LLC



Project: 60139695-5460
 Date: May 2010



Map Location



The above geometry reflects 6:00 AM PDT on June 21 at Blythe. The solar elevation angle is 5 degrees above the horizon and the solar azimuth is 65 degrees clockwise from north. Any reflection along the HCE tube will be directed downward and will strike the ground within a short distance. Such a reflection will not be visible from the air.

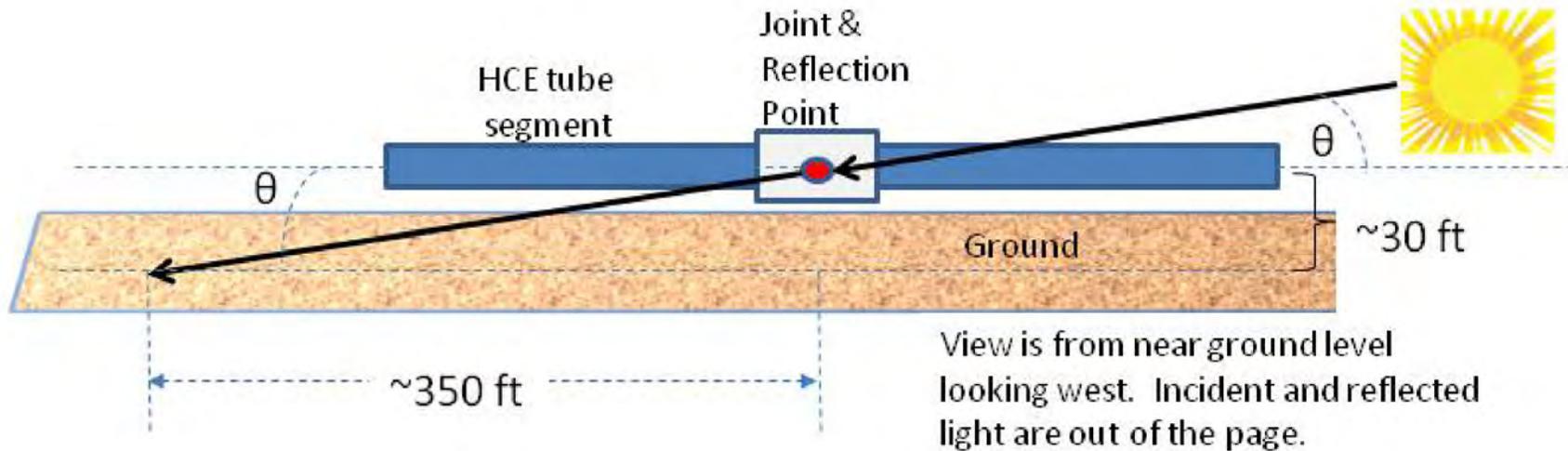
Blythe Solar Power Project

Palo Verde I, LLC

**Figure 6
Horizontal Projection of
Sun's Rays and Reflection Rays,
for June 21 and April 10**

AECOM

Project: 60139695-5460
Date: May 2010



View is from near ground level looking west. Incident and reflected light are out of the page.

Map Location



The above geometry reflects 6:00 AM PDT on June 21 at Blythe. The solar elevation angle is 5 degrees above the horizon and the solar azimuth is 65 degrees clockwise from north. Any reflection along the HCE tube will be directed downward and will strike the ground within a short distance. Such a reflection will not be visible from the air.

Blythe Solar Power Project

Palo Verde I, LLC

Figure 7
Analysis of Postulated Reflection
Scenario for a Reflection
Along the HCE Tube

AECOM

Project: 60139695-5460
 Date: May 2010

**BLYTHE SOLAR POWER PROJECT (09-AFC-6)
RESPONSE TO ALUC COMMISSION COMMENTS
FROM MAY 13, 2010 COMMISSION MEETING**

Page 10

Response Date: May 27, 2010

Attachment 1

FAA Review Status

ALL of My Cases (Off Airport)

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All Cases Show All Cases (134)	Filter by Case Status Draft (0) Accepted (0) Work in Progress (67) Determined (23) Circularized (0) Terminated (44)	Cases Requiring Action 7460-2 Required (9) Add Letter (0)
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Records 1 to 134 of 134

Page 1 of 1

Project Name	Structure Name	ASN	Status	Date Accepted	Date Determined	City	State
SOLAR-000134596-09	Air-Cooled Condenser...	2009-AWP-6298-OE	Determined	12/02/2009	12/29/2009	Blythe	CA
SOLAR-000134596-09	Air-Cooled Condenser...	2009-AWP-6297-OE	Determined	12/02/2009	12/29/2009	Blythe	CA
SOLAR-000134596-09	BSPP Pole #PB1-1	2009-AWP-6293-OE	Determined	12/02/2009	12/29/2009	Blythe	CA
SOLAR-000134596-09	BSPP Pole #PB1-2	2009-AWP-6292-OE	Determined	12/02/2009	12/21/2009	Blythe	CA
SOLAR-000134596-09	BSPP Pole #PB1.4-1	2009-AWP-6295-OE	Determined	12/02/2009	12/21/2009	Blythe	CA
SOLAR-000134596-09	BSPP Pole #PB1.4-2	2009-AWP-6294-OE	Determined	12/02/2009	12/21/2009	Blythe	CA
SOLAR-000134596-09	BSPP Pole #PB2.3-1	2009-AWP-6291-OE	Determined	12/02/2009	12/29/2009	Blythe	CA
SOLAR-000134596-09	BSPP Pole #PB2.3-2	2009-AWP-6290-OE	Determined	12/02/2009	12/29/2009	Blythe	CA
SOLAR-000134596-09	BSPP Pole #PB2.3-3	2009-AWP-6289-OE	Determined	12/02/2009	04/19/2010	Blythe	CA
SOLAR-000134596-09	BSPP Pole #PB4-1	2009-AWP-6288-OE	Determined	12/02/2009	12/29/2009	Blythe	CA
SOLAR-000134596-09	BSPP Pole #PB4-2	2009-AWP-6287-OE	Determined	12/02/2009	12/29/2009	Blythe	CA
SOLAR-000134596-09	BSPP Pole #PB4-3	2009-AWP-6286-OE	Determined	12/02/2009	12/21/2009	Blythe	CA
SOLAR-000134596-09	BSPP Pole #PB4-4	2009-AWP-6341-OE	Determined	12/02/2009	12/29/2009	Blythe	CA
SOLAR-000134596-09	BSPP Pole #PB4-5	2009-AWP-6284-OE	Determined	12/02/2009	12/21/2009	Blythe	CA
SOLAR-000134596-09	BSPP Pole #PBS-1	2009-AWP-6296-OE	Determined	12/02/2009	12/29/2009	Blythe	CA
SOLAR-000146442-10	BSPP-gentle-101	2010-AWP-3766-OE	Work In Progress	05/12/2010		Blythe	CA
SOLAR-000146442-10	BSPP-gentle-102	2010-AWP-3765-OE	Determined	05/12/2010	05/26/2010	Blythe	CA
SOLAR-000146442-10	BSPP-gentle-103	2010-AWP-3764-OE	Determined	05/12/2010	05/26/2010	Blythe	CA
SOLAR-000146442-10	BSPP-gentle-104	2010-AWP-3763-OE	Determined	05/12/2010	05/26/2010	Blythe	CA
SOLAR-000146442-10	BSPP-gentle-105	2010-AWP-3762-OE	Determined	05/12/2010	05/26/2010	Blythe	CA
SOLAR-000146442-10	BSPP-gentle-106	2010-AWP-3761-OE	Determined	05/12/2010	05/26/2010	Blythe	CA
SOLAR-000146442-10	BSPP-gentle-107	2010-AWP-3760-OE	Determined	05/12/2010	05/26/2010	Blythe	CA
SOLAR-000146442-10	BSPP-gentle-108	2010-AWP-3759-OE	Determined	05/12/2010	05/26/2010	Blythe	CA
SOLAR-000146442-10	BSPP-gentle-109	2010-AWP-3758-OE	Determined	05/12/2010	05/26/2010	Blythe	CA
SOLAR-000146442-10	BSPP-gentle-110	2010-AWP-3757-OE	Work In Progress	05/12/2010		Blythe	CA

SOLAR-000146442-10

BSPP-gentle-175

2010-AWP-3692-OE

Work In Progress

05/12/2010

Blythe

CA

**BLYTHE SOLAR POWER PROJECT (09-AFC-6)
RESPONSE TO ALUC COMMISSION COMMENTS
FROM MAY 13, 2010 COMMISSION MEETING**

Page 11

Response Date: May 27, 2010

Attachment 2

Alternative Project Location and Size Consideration Documentation

(Please See Alternatives Section of AFC)

**BLYTHE SOLAR POWER PROJECT (09-AFC-6)
RESPONSE TO ALUC COMMISSION COMMENTS
FROM MAY 13, 2010 COMMISSION MEETING**

Page 12

Response Date: May 27, 2010

Attachment 3

CV and Qualifications for Douglas Moss



Douglas M. Moss

AeroPacific Consulting

22487 Kent Ave
Torrance, CA 90505
888-291-7881

<http://www.aeropacific.net>
Info@aeropacific.net

Firm/Expert Profile:

Douglas Moss (BS Engr, MS Engr, MBA, JD) is a trained and experienced professional pilot and engineer. He provides research and investigations of aircraft accidents to determine the causal factors. His professional experience spans over 30 years in aviation as an engineer and professional pilot, including assignments as a USAF fighter pilot, USAF experimental test pilot, McDonnell Douglas engineering test pilot, airline pilot, and general aviation pilot. His academic education includes both bachelor and master degrees in engineering, with additional advanced degrees in business and law. He has also been a faculty instructor at the USAF Test Pilot School, teaching aircraft certification, flying qualities, performance, systems, and human factors.

His analysis of aviation accidents typically involve the following considerations:

- Engineering and scientific bases
- Operational factors
- Human factors
- Aircraft certification compliance (14 CFR Parts 21 and 25)
- FAR statutory compliance (14 CFR Parts 91, 121 and 135)
- Strict products liability
- Aircrew standard of care

Professional Experience:

Over 10,000 flight hours
USAF experimental test pilot
McDonnell Douglas engineering test pilot
USAF Test Pilot School instructor
Airline pilot
ATP Typed DC-9, MD-80, MD-90, MD-11, A320 and Flight Engineer
Qualified in various models of Cessna, Piper, and Beechcraft

Education/ Training:

Concord Law School, Juris Doctor
University of Phoenix: Master of Business Administration
Georgia Institute of Technology: Master of Science – Mechanical Engineering
Georgia Institute of Technology: Bachelor of Engineering - Nuclear Engineering
US Air Force: USAF Test Pilot School, Air War College, Air Command & Staff College, Squadron Office School

Professional Qualifications:

Airline Transport Pilot
Type Certificates: A320, MD-11, DC-9 (MD-80, MD-90)
Type Qualifications: F-15, F-4, A-37, T-33, T-34, T-37, T-38, T-46
Single-Engine, Land & Sea; Multi-Engine; Instrument
Flight Engineer – Turbojet Powered

Professional Affiliations:

Society of Experimental Test Pilots
Air Line Pilots Association
Aircraft Owners and Pilots Association
American Institute of Aeronautics and Astronautics
Society of Automotive Engineers - SAE International
Association of Aviation Psychology

**BLYTHE SOLAR POWER PROJECT (09-AFC-6)
RESPONSE TO ALUC COMMISSION COMMENTS
FROM MAY 13, 2010 COMMISSION MEETING**

Page 13

Response Date: May 27, 2010

Attachment 4

Letters of Support from Pilots in the Blythe Area

Fax

54th District Agricultural Association

COLORADO RIVER FAIR

591 N. Olive Lake Blvd

Blythe, CA 92225

Phone 1-760-922-3247 Fax 1-760-922-6196

crfb@verizon.net www.coloradoriverfair.com

TO Ryan Orr From Greg Sprauls

Fax 661 793-6627 Pages 2

Phone 760 989-9616 Date May 13, 2010

RE: _____ CC: _____

Message:

Tropical Nights
and Midway Lights
at the
COLORADO RIVER FAIR 2010



APRIL 8-11
2010
BLYTHE, CA
Be There!

Gregory E. Sprawls
10810 La Palma
Blythe, California 92225
(760) 989-9616

May 12, 2010

Riverside County Airport Land Use Commission
4080 Lemon Street
Riverside, California 92501
FAX (951) 955-0923

Commission,

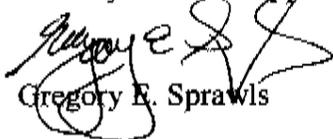
I have been a private pilot since 1982, flying mainly out of the Blythe Airport. My opinions and beliefs have been developed from flying a small plane all over the western United States. There are many restricted flight areas whether it is military, prison, domestic housing, power plants, or even special events. Most pilots are familiar with this and take appropriate planning to get to their desired destination.

The proposal to build a solar facility adjacent to the Blythe Airport is brilliant. Neighborhoods complain about the noise when next to an airport. Industry is the perfect land use. There already is a trucking company operating next to the airport. The solar facility cooling station is not an obstacle for aircraft because of its location and it does not emit clouds of moisture. You are taught in Flight School that "wind is not weather" so the release of the cool air is not weather that hampers flight.

The positioning of your towers also seems to be well planned. Aircraft is designed to be in the air unless landing or parked. Pilots are uncomfortable close to the ground so immediately after rotating altitude is desired and landing is a very specific route and slope.

I encourage the construction of this type of industry next to the Blythe Airport. If I can be of any further assistance please do not hesitate to contact me.

Thank you for the opportunity to supply input.



Gregory E. Sprawls

**STATE OF CALIFORNIA
ENERGY RESOURCES CONSERVATION AND DEVELOPMENT COMMISSION**

In the Matter of:
APPLICATION FOR CERTIFICATION
for the *BLYTHE SOLAR POWER PROJECT*

Docket No. 09-AFC-6
PROOF OF SERVICE
(Revised 1/26/2010)

APPLICANT

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Senior Director of Project
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INTERVENORS

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DECLARATION OF SERVICE

I, Carl Lindner, declare that on, June 16, 2010, I served and filed copies of the attached:

BSPP; RESPONSE TO ALUC COMMENTS OF MARCH 22, 2010 ON ALUC APPLICATION AND SUBSEQUENT CORRESPONDENCE BY EMAIL ON APRIL 13, 2010

BSPP; RESPONSE TO ALUC COMMISSION COMMENTS FROM MAY 13, 2010 COMMISSION MEETING

The original document, filed with the Docket Unit, is accompanied by a copy of the most recent Proof of Service list, located on the web page for this project at:

[\[http://www.energy.ca.gov/sitingcases/solar_millennium_blythe\]](http://www.energy.ca.gov/sitingcases/solar_millennium_blythe).

The document has been sent to the other parties in this proceeding (as shown on the Proof of Service list) and to the Commission's Docket Unit, in the following manner:

(Check all that Apply)

For service to all other parties:

sent electronically to all email addresses on the Proof of Service list;

_____ by personal delivery or by overnight delivery service or depositing in the United States mail at Camarillo, California with postage or fees thereon fully prepaid and addressed as provided on the Proof of Service list above to those addresses **NOT** marked "email preferred."

AND

For filing with the Energy Commission:

sending an original paper copy and one electronic copy, mailed and emailed respectively, to the address below (preferred method);

OR

_____ depositing in the mail an original and 12 paper copies, along with 13 CDs, as follows:

CALIFORNIA ENERGY COMMISSION

Attn: Docket No. 09-AFC-6
1516 Ninth Street, MS-4
Sacramento, CA 95814-5512

docket@energy.state.ca.us

I declare under penalty of perjury that the foregoing is true and correct.