



DEPARTMENT OF THE AIR FORCE
DETACHMENT 1, AERONAUTICAL SYSTEMS CENTER (AFMC)
PRODUCTION FLIGHT TEST INSTALLATION, AF PLANT 42
2503 EAST AVE P, PALMDALE CA 93550-2196

DOCKET

08-AFC-9

DATE AUG 30 2010

RECD SEP 08 2010

30 Aug 10

MEMORANDUM FOR CA ENERGY COMMISSION, DOCKET NO. 08-AFC-9
ATTENTION: MS. FELICIA MILLER, PROJECT MANAGER

FROM: ASC DET 1/CC

SUBJECT: Palmdale Hybrid Power Plant – Glint and Glare Impacts to Air Force Plant 42

1. In our 21 May 10 letter to the CEC, we noted that the US Air Force was “continuing to review the project with respect to potential flight restrictions due to the solar mirror arrays.” After review of other bodies of work on this issue and careful consideration of the situation, we are now able to formally comment on the potential glint and glare impact on operations at US Air Force Plant 42 (AFP 42).
2. Aviation safety impacts of glint and glare continue to be a concern for flight operations in and around AFP 42. We have recently reviewed the Supplemental Staff Assessment for the Blythe Solar Power Project (BSPP), which is the most thorough aviation assessment we have seen to date. The Blythe assessment concluded that "... solar troughs pose a potential significant adverse impact to pilots at the Blythe airport" and recommended several mitigations to reduce this impact. The Blythe project assessment is a very relevant comparison as the project scope and airfield configuration are similar to Palmdale Hybrid Power Plant (PHPP)/AFP 42. As the Blythe Airport is important to their local community, AFP 42's airfield is crucial to the Antelope Valley, the DoD industrial base, the Air Force mission in the region and commercial air traffic operations.
3. However, we believe the potential and risks of glare are even higher at AFP 42. First, BSPP's collector farm will be a mile North-West of the primary runway. The PHPP collector farm is proposed to be within quarter mile of AFP 42's east-west runway (07/25). Second, the BSPP Supplemental Staff Assessment noted that glare potential exists when the mirrors are incorrectly aligned, are being rotated to/from their stow positions, and from possible end-of-collector spillage at low sun angles. As at BSPP, under certain conditions short-term/intermittent glare hazards could be created at AFP 42 by the PHPP solar array. In particular, for runway 07/25, glint/glare could be intense at certain times of year/times of day during approach, the most critical phase of flight.
4. Therefore, while the US Air Force will continue to analyze potential glint and glare on AFP 42 and to determine potential airfield operational impacts that may result, we recommend that the following Permit Conditions be placed upon the project so as to allow the project to proceed:

1) Require the applicant and successive owner operators to take all reasonable measures available to ensure that pilots are warned of the possible presence of glint or glare resulting from the project.

PROOF OF SERVICE (REVISED 7/1/10) FILED WITH
ORIGINAL MAILED FROM SACRAMENTO ON 9/8/10

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2) Require the applicant and successive owner operators to ensure that the project employs reasonable measures in its construction and operation so that the creation of glint and glare upon AFP 42 airfield traffic is minimized.

3) Require the applicant and successive owner operators to ensure that the solar mirror arrays maintain proper alignment to reduce the incidences of glint and glare occurring from misalignment.

4) Require the applicant and successive owner operators to provide complaint forms to AFP 42 in order to contact the applicant should any adverse glint or glare be noted. The applicant should be required to contact the Energy Commission compliance project manager when it receives such a complaint, investigate whether the complaint was justified and the project was in fact responsible for the condition that triggered the complaint, and, if so, fix the source of the complaint.

5) Require the PHPP operator to maintain a communications link with the AFP 42 control tower so that, if other mitigations are not available during critical operations, the solar arrays can be briefly reoriented to prevent glint/glare from impacting flight safety.

5. If and when the US Air Force does obtain additional analysis on the potential glint and glare from the project on AFP 42 airfield, or identifies any unacceptable operational impacts due to glint and/or glare from the project, that information will be provided to the CEC and to the applicant so as to ensure that Permit Condition 2, noted in paragraph 4 herein, remains effectual. However, at this time we believe that glint/glare impacts will be relatively limited, and that we will be able to mitigate such glint/glare as may occur through airfield operational adjustments. Accordingly, if the permit conditions recommended above are adopted, we have no objections to continuation of the permitting process.

6. Should any changes be made, prior to permit issuance, to the subject Conceptual Site Plan, the location, alignment or orientation of the solar mirror collectors, or the resulting production of any related studies/reports/analysis, we would request the opportunity to review and comment once again.

7. Further questions should be directed to the undersigned at 661-272-6770.



RONALD E. CLEAVES, Lt Col, USAF
Commander

cc:

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APPLICATION FOR CERTIFICATION
For the *PALMDALE HYBRID*
POWER PROJECT

Docket No. 08-AFC-9

PROOF OF SERVICE

(Revised 7/1/2010)

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DECLARATION OF SERVICE

I, Hilarie Anderson, declare that on, September 8, 2010, I served and filed copies of the attached Letter from R. Cleaves Regarding Glint & Glare Impacts to Air Force Plant 42. 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/palmdale/index.html>]**. The document has been sent to both 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;
- by delivering on this date, for mailing with the United States Postal Service with first-class postage thereon fully prepaid, to the name and address of the person served, for mailing that same day in the ordinary course of business; that the envelope was sealed and placed for collection and mailing on that date 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, as follows:

CALIFORNIA ENERGY COMMISSION

Attn: Docket No. 08-AFC-9
1516 Ninth Street, MS-4
Sacramento, CA 95814-5512
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I declare under penalty of perjury that the foregoing is true and correct, that I am employed in the county where this mailing occurred, and that I am over the age of 18 years and not a party to the proceeding.

Original Signature in Dockets
Hilarie Anderson