

## DOCKETED

<b>Docket Number:</b>	09-AFC-07C
<b>Project Title:</b>	Palen Solar Power Project - Compliance
<b>TN #:</b>	200371
<b>Document Title:</b>	FAA Determinations of No Hazard to Air Navigation
<b>Description:</b>	N/A
<b>Filer:</b>	Marie Fleming
<b>Organization:</b>	Galati   Blek LLP
<b>Submitter Role:</b>	Applicant's Consultant
<b>Submission Date:</b>	8/29/2013 10:39:29 AM
<b>Docketed Date:</b>	8/29/2013

August 29, 2013

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

**Subject: FEDERAL AVIATION ADMINISTRATION DETERMINATIONS OF NO HAZARD TO AIR NAVIGATION  
PALEN SOLAR ELECTRIC GENERATING SYSTEM  
DOCKET NO. (09-AFC-7C)**

Enclosed for filing with the California Energy Commission is the electronic version of **FEDERAL AVIATION ADMINISTRATION DETERMINATIONS OF NO HAZARD TO AIR NAVIGATION**, for Palen Solar Electric Generating System (09-AFC-7C).

Sincerely,



Marie Fleming



Mail Processing Center  
 Federal Aviation Administration  
 Southwest Regional Office  
 Obstruction Evaluation Group  
 2601 Meacham Boulevard  
 Fort Worth, TX 76137

Aeronautical Study No.  
 2013-AWP-1618-OE

Issued Date: 07/18/2013

Charles Turlinski  
 Palen Solar Holdings, LLC  
 1999 Harrison Street  
 Suite 2150  
 Oakland, CA 94612

**\*\* DETERMINATION OF NO HAZARD TO AIR NAVIGATION \*\***

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Solar Tower Unit 1  
 Location: Desert Center, CA  
 Latitude: 33-41-50.94N NAD 83  
 Longitude: 115-13-32.35W  
 Heights: 548 feet site elevation (SE)  
 760 feet above ground level (AGL)  
 1308 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is marked/lighted in accordance with FAA Advisory circular 70/7460-1 K Change 2, Obstruction Marking and Lighting, a med-dual system - Chapters 4,8(M-Dual),&12.

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part I)
- Within 5 days after the construction reaches its greatest height (7460-2, Part II)

See attachment for additional condition(s) or information.

Any height exceeding 760 feet above ground level (1308 feet above mean sea level), will result in a substantial adverse effect and would warrant a Determination of Hazard to Air Navigation.

This determination expires on 01/18/2015 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

**NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.**

This determination is subject to review if an interested party files a petition that is received by the FAA on or before August 17, 2013. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted in triplicate to the Manager, Airspace Regulations & ATC Procedures Group, Federal Aviation Administration, Airspace Regulations & ATC Procedures Group, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

This determination becomes final on August 27, 2013 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Airspace Regulations & ATC Procedures Group via telephone -- 202-267-8783 - or facsimile 202-267-9328.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Karen McDonald, at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2013-AWP-1618-OE.

**Signature Control No: 185279790-194289329**

( DNH )

John Page

Manager, Obstruction Evaluation Group

Attachment(s)

Additional Information

Case Description

Map(s)

## Additional information for ASN 2013-AWP-1618-OE

The proposed project submitted by Palen Solar Holdings, LLC will construct two 760-foot above ground level (agl) Solar Towers near Desert Center in the Mojave Desert, California. There are no civilian public-use or military landing areas within 12 nautical miles (NM) of the sites; however there are several military training VR and IR routes in the vicinity.

The structure heights exceed the obstruction standards of Title 14 Code of Federal Regulations (CFR) Part 77 as follows:

Section 77.17(a)(1) by 261 feet - a height more than 499 feet above ground level (agl) at the site.

Details of the proposal were distributed as Public Notice in order to gather aeronautical information. No objections were received. Comments were received from the United States Department of the Interior; National Park Service (NPS), requesting the Sponsor to consider installation of an Audio Visual Warning System (AVWS) for Obstruction Lighting on the two solar towers, in order to preserve the starry night skies and natural darkness of this portion of the Mojave Desert Wilderness Area which includes Joshua Tree National Park. The NPS uses the term "natural lightscape" to describe resources and values that exist in the absence of human-caused light at night, which may affect wildlife species dependent on natural patterns of light and dark for behaviors and navigation.

FAA Response; The Sponsor has requested installation of dual-red and medium intensity white lighting installations on these two Solar Towers, which will be entered as the obstruction marking and lighting recommendation on the final airspace determinations for aviation conspicuity. However, this does not preclude the Sponsor considering the NPS request for AVWS lighting on the structures after guidance is published by the FAA on the feasibility of AVWS meeting aviation conspicuity technical standards.

### AERONAUTICAL STUDY FOR POSSIBLE EFFECT UPON THE OPERATION OF AN AIR NAVIGATION AID:

- None.

### AERONAUTICAL STUDY FOR POSSIBLE INSTRUMENT FLIGHT RULES (IFR) EFFECT DISCLOSED THE FOLLOWING:

- The proposal would have no effect on any existing or proposed IFR arrival/departure routes, operations, or procedures.
- The proposal would have no effect on any existing or proposed IFR en route routes, operations, or procedures.
- The proposal would have no effect on any existing or proposed IFR minimum flight altitudes.

### AERONAUTICAL STUDY FOR POSSIBLE VISUAL FLIGHT RULES (VFR) EFFECT DISCLOSED THE FOLLOWING:

- The proposal would have no effect on any existing or proposed VFR arrival or departure routes, operations or procedures.

- The proposal would not conflict with airspace required to conduct normal VFR traffic pattern operations at any known public use or military airports.
- The proposal would not penetrate those altitudes normally considered available to airmen for VFR en route flight.
- The structure shall be appropriately obstruction lighted with a dual-red and medium intensity white obstruction lighting installation.

The cumulative impact of the proposed structure, when combined with other existing structures is not considered significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports or navigational facilities. Nor would the proposal affect the capacity of any known existing or planned civilian public-use or military airport.

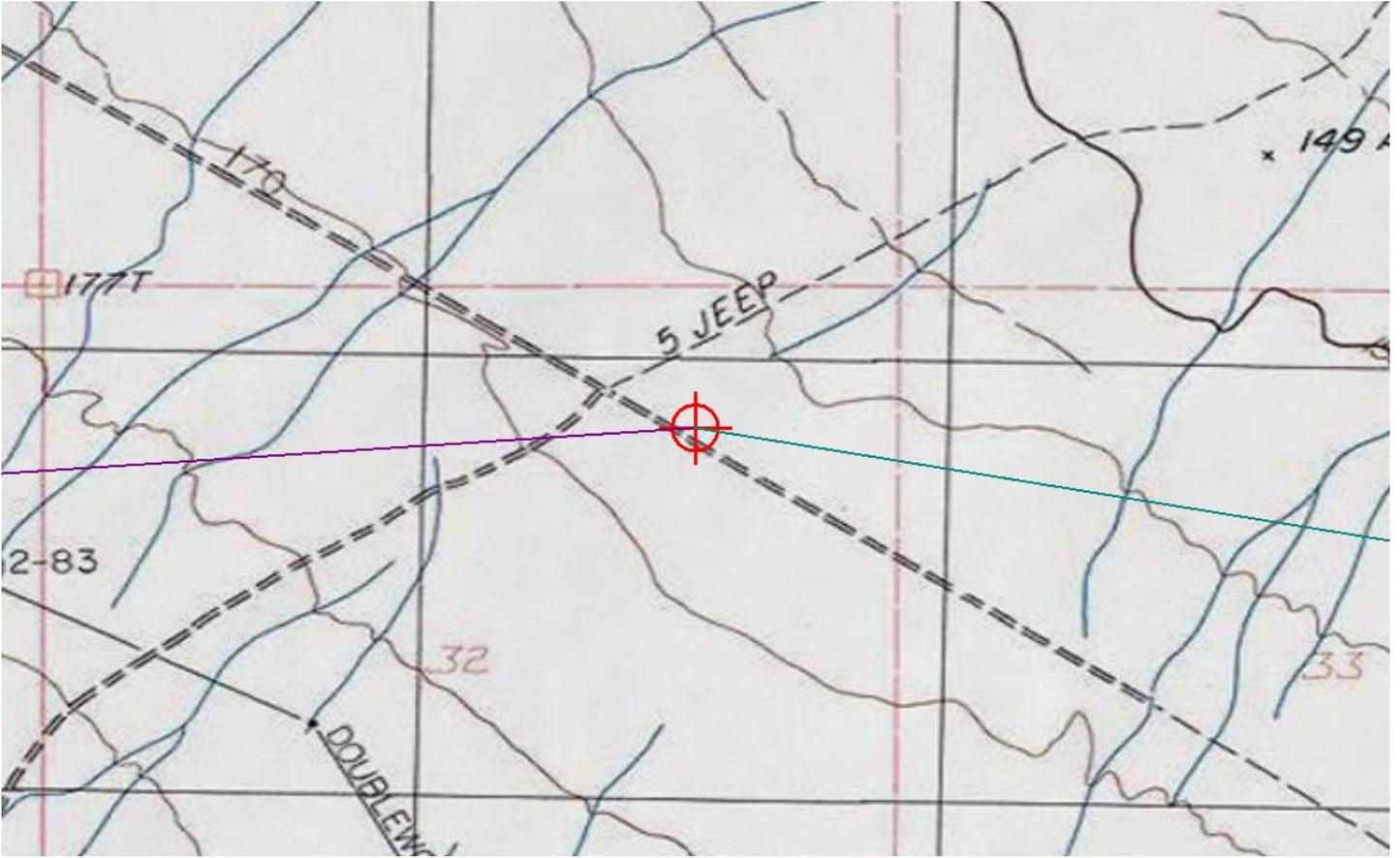
Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

This determination, issued in accordance with Part 77, concerns the effect of the proposal on the safe and efficient use of the navigable airspace by aircraft and does not relieve the sponsor of any compliance responsibilities relating to laws, ordinances, or regulations of any Federal, state, or local governmental bodies.

Determinations, which are issued in accordance with Part 77, do not supersede or override any state, county, or local laws, aviation easements, or ordinances, or local zoning maximum heights.

**Case Description for ASN 2013-AWP-1618-OE**

Filing for one of two solar towers near Desert Center, CA.







Mail Processing Center  
 Federal Aviation Administration  
 Southwest Regional Office  
 Obstruction Evaluation Group  
 2601 Meacham Boulevard  
 Fort Worth, TX 76137

Aeronautical Study No.  
 2013-AWP-1619-OE

Issued Date: 07/18/2013

Charles Turlinski  
 Palen Solar Holdings, LLC  
 1999 Harrison Street  
 Suite 2150  
 Oakland, CA 94612

**\*\* DETERMINATION OF NO HAZARD TO AIR NAVIGATION \*\***

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Solar Tower Unit 2
Location:	Desert Center, CA
Latitude:	33-41-03.65N NAD 83
Longitude:	115-12-11.39W
Heights:	538 feet site elevation (SE) 760 feet above ground level (AGL) 1298 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

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See attachment for additional condition(s) or information.

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- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
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**Signature Control No: 185279791-194289330**

( DNH )

John Page

Manager, Obstruction Evaluation Group

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### AERONAUTICAL STUDY FOR POSSIBLE EFFECT UPON THE OPERATION OF AN AIR NAVIGATION AID:

- None.

### AERONAUTICAL STUDY FOR POSSIBLE INSTRUMENT FLIGHT RULES (IFR) EFFECT DISCLOSED THE FOLLOWING:

- The proposal would have no effect on any existing or proposed IFR arrival/departure routes, operations, or procedures.
- The proposal would have no effect on any existing or proposed IFR en route routes, operations, or procedures.
- The proposal would have no effect on any existing or proposed IFR minimum flight altitudes.

### AERONAUTICAL STUDY FOR POSSIBLE VISUAL FLIGHT RULES (VFR) EFFECT DISCLOSED THE FOLLOWING:

- The proposal would have no effect on any existing or proposed VFR arrival or departure routes, operations or procedures.

- The proposal would not conflict with airspace required to conduct normal VFR traffic pattern operations at any known public use or military airports.
- The proposal would not penetrate those altitudes normally considered available to airmen for VFR en route flight.
- The structure shall be appropriately obstruction lighted with a dual-red and medium intensity white obstruction lighting installation.

The cumulative impact of the proposed structure, when combined with other existing structures is not considered significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports or navigational facilities. Nor would the proposal affect the capacity of any known existing or planned civilian public-use or military airport.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

This determination, issued in accordance with Part 77, concerns the effect of the proposal on the safe and efficient use of the navigable airspace by aircraft and does not relieve the sponsor of any compliance responsibilities relating to laws, ordinances, or regulations of any Federal, state, or local governmental bodies.

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