**DOCKETED**

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<th>Docket Number:</th>
<th>09-AFC-07C</th>
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<tr>
<td><strong>Project Title:</strong></td>
<td>Palen Solar Power Project - Compliance</td>
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<td><strong>TN #:</strong></td>
<td>202585</td>
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<tr>
<td><strong>Document Title:</strong></td>
<td>Email Re: Request for Ivanpah Report, dated June 10, 2014</td>
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<tr>
<td><strong>Description:</strong></td>
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<td><strong>Filer:</strong></td>
<td>Alicia Campos</td>
</tr>
<tr>
<td><strong>Organization:</strong></td>
<td>Federal Aviation Administration/Dan Rollins</td>
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<td>Public Agency</td>
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Jim,

Attached is the Ivanpah analysis. It follows the same format as the Palen analysis, with the same information slides. I added comments to each slide to explain some of our aviation terms, as well as the aircraft type and airport ID information.

In this study there were military flights above 50,000’ MSL. For security reasons, these flights were removed from the images. However, they are included in the flight count on slide six.

If you have any questions, please let me know.

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Johanna,

My colleagues and I were very impressed with the Palen Aeronautical Study Dan generated. It will be useful in educating Energy Commissioners, their advisers and staff, parties to the proceeding, intervenors and members of the public. We would like to have a similar report for Ivanpah Solar Electric Generating System (ISEGS). Clark County (Nevada) Department of Aviation gave us some data but it was not as detailed as the Palen Study. Aeronautical information for ISEGS during the month of May 2014 would be directly comparable to the Palen data. We appreciate the FAA’s involvement in providing information important to our investigation of solar power tower projects generating significant glare.

Thank you,
Ivanpah Solar Project
Aeronautical Study

Presented to: California Energy Commission
By: Western Service Center Operations Support Group
Date: June 2014
Ivanpah Aeronautical Study

- California Energy Commission requested aeronautical information in the area of the Ivanpah Solar Project

- Requested flight information within a 15nm radius of the project location, at all altitudes
Analysis Parameters

- Using the Performance Data Analysis and Reporting System (PDARS)

- Traffic data from the Los Angeles Air Route Traffic Control Center (ZLA ARTCC)

- May 2014 (complete month)

- Examined center-point 35°33'23.87"N, 115°28'13"W
Analysis Limitations

- No Visual Flight Rules (VFR) flights shown
  - This is a data limitation, and are not available

- Radar limitations in the area may result in some low altitude flights being missed
  - This should be a very limited amount

- Occasionally flights tracks split, causing multiple counts for one flight. Therefore total track count may not equal total flight count

- 45 flights through the region did not contain flight information, such as type, arrival or departure airport. These were general aviation, military or unidentified targets being tracked by Air Traffic Control for various reasons
List of Departure Airports

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<tr>
<th>Airport</th>
<th>Departures</th>
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<tr>
<td>VGT</td>
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<tr>
<td>SBA</td>
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<td>2284</td>
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<td>LAS</td>
<td>3405</td>
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</table>

Airports with 50 or more departures through the examined area

Ivanpah Solar Project – Aeronautical Study
June 2014
List of Arrival Airports

Airports with 100 or more arrivals through the examined area

Ivanpah Solar Project – Aeronautical Study
June 2014

Federal Aviation Administration
Aircraft Types

Total

Aircraft with 100 or more types through the examined area

Ivanpah Solar Project – Aeronautical Study
June 2014
Time of Day

Total

680 628 659 544 446 270 136 48 31 24 10 11 75 438 602 670 793 902 809 744 851 835 827 936

00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23

Midnight local time  Noon local time

Times are in UTC: 0000 UTC = 1700 Pacific Daylight Time

Ivanpah Solar Project – Aeronautical Study
June 2014

Federal Aviation Administration
FL200-300 – 3761 Tracks
FL400-500 - 343 Tracks

No non-military flights above FL500
Observations

- Below FL300 the majority of flights are to/from the Las Vegas area airports (LAS, VGT & HND)

- Heaviest departure and arrival airport demand is LAX and the Las Vegas area airports

- Above FL300 practically all flights are to/from southern California airports

- Majority of flights are commercial jets with 70 passenger seats or more
Questions?