

Air Resources Board

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DOCKET

TO:

Che McFarlin, Project Manager

California Energy Commission Energy Facilities Siting Division

1516 9th Street, MS-15 Sacramento, CA 95814

FROM:

Kitty Howard, Manager

Regulatory Assistance Section

DATE:

June 5, 2007

SUBJECT:

COMMENTS ON THE PRELIMINARY DETERMINATION OF

COMPLIANCE (PDOC) FOR STARWOOD POWER-MIDWAY, LLC

(06-AFC-10)

This memorandum is in response to the request that the California Air Resources Board review and comment on the Preliminary Determination of Compliance (PDOC) for Starwood Power-Midway, LLC.

We appreciate the opportunity to provide comments on this document and have included them as an attachment to this memorandum. If you have any questions regarding our comments, please contact Ms. Simona Altman, Air Pollution Specialist of my staff at (916) 322-2778 or via email at saltman@arb.ca.gov.

Attachment

cc: Ms. Simona Altman

Regulatory Assistance Section

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our website: http://www.arb.ca.gov.

California Environmental Protection Agency

CALIFORNIA AIR RESOURCES BOARD COMMENTS ON PRELIMINARY DETERMINATION OF COMPLIANCE (PDOC) STARWOOD POWER-MIDWAY, LLC PROJECT NUMBER C1063535, 06-AFC-10

Project Description: The Starwood Power project is a proposal to install and operate a peaker power plant in the San Joaquin Valley. It consists of two Pratt & Whitney FT8-3 SwiftPac Combustion Turbine Generators. The generators are powered by two turbines each. The two turbines exhaust to the atmosphere through a single stack. Each turbine is rated at 30 MW.

The District Permit Engineer is Dustin Brown.

- The air quality analysis for the Starwood project assumes one hour in startup mode and one hour in shutdown mode per turbine, per day (PDOC Section VII.A). The PDOC should reflect the emissions that were assumed for the purpose of the AFC analysis by including a condition that limits each turbine to operating in startup and shutdown modes for no more than one hour in each mode per day.
- 2. The Starwood power plant is required to obtain a federally-enforceable Title V operating permit. Title V permits include a requirement for annual compliance certification. Additionally, Title V permits are renewed on a five-year basis. In order to demonstrate compliance with the permitted emission limits within a timeframe that corresponds with the Title V permit, source testing to measure NOX, CO, and VOC startup and shutdown emissions should be required to be conducted at a minimum frequency of once every five years, rather than every seven years (PDOC condition 44).
- 3. The two turbines associated with each SwiftPac Generator are vented to a single exhaust stack. Each turbine is required to meet individual mass emission limits and individual pollutant concentration limits. Additionally, each pair of turbines is required to meet combined mass emission limits. If both turbines operate simultaneously during source testing, the source test will show the emission rates and concentrations of the combined exhaust from both turbines, but not the individual emission rates and concentrations.

Currently, the PDOC allows annual source testing to be conducted while the turbines operate either individually or simultaneously (PDOC condition 46). In order to determine individual emission rates and concentrations, annual source testing should be required to be conducted with each turbine operating individually, in addition to operating simultaneously.