AIRCRAFT OWNERS AND PILOTS ASSOCIATION
421 Aviation Way • Frederick, MD 21701-4798
Telephone (301) 695-2000 • Fax (301) 695-2375
www.aopa.org

July 17, 2007

Mr. James S. Adams, MA
Environmental Office, MS 40
California Energy Commission
1516 9th Street
Sacramento, California 95814-5504

Subject: Staff Assessment-Russell City Energy Center

Dear Mr. Adams:

The Aircraft Owners and Pilots Association (AOPA) represents the general aviation interests of 412,000 members, more than two-thirds of the nation's pilots, including over 50,000 members in the State of California. AOPA is committed to ensuring the future viability and economic development of general aviation airports and their facilities as part of the state and national transportation system. Any development that threatens the safety of aircraft operating near airports can be considered a threat to the viability of a local airport and the national aviation transportation system. This is especially true in highly developed metropolitan areas such as the San Francisco Bay area and Hayward, California.

While the Association can understand the need to meet the ever-growing demands for electric energy in Northern California and Hayward, based on the information we have reviewed regarding the above referenced project, AOPA is strongly opposed to approval and construction of the Russell City Energy Center at the currently proposed location which is roughly one mile from Hayward Executive Airport (HWD). HWD, with over 477-based aircraft and nearly 125,000 operations each year, is a major reliever airport in the Bay Area.

We believe that the Staff Assessment clearly demonstrates and identifies a number of potential safety impacts to aviation operations and that thermal plumes generated by the facility could create hazards to aircraft operating into and out of the Hayward Executive Airport. We are particularly concerned that while local pilots may be familiar with the facility if it is constructed, over flights from transient aircraft unfamiliar with the facility will occur.

Additionally, during certain atmospheric conditions, vapor plumes created by this plant will create turbulent conditions for aircraft that over fly the site either on approach to HWD or another airport in the same geographic area. Such vapor plumes will also have an impact on visual navigation equipment used for navigation to the airport under either visual or instrument conditions.

A similar gas turbine generation facility is located approximately the same overall distance (approximately 1 mile) from the Blythe, California airport. Our members have reported to us the same detrimental effect on their ability to land safely at that airport. Aircraft have experienced flight "upsets" due to turbulence encountered while over flying the exhaust stacks of that facility. It is our understanding that a number of mitigation measures promised by the proponent of the Blythe site was never implemented as promised.

The FAA Flight Procedure Standards Branch, AFS-400, has issued a report on "Safety Risk Analysis of Aircraft Overflight of Industrial Exhaust Plumes." In January 2006, this study was issued as a report and published under Safety Study Report DOT-FAA-AFS-420-06-1.

In summary, the report indicated:

> *The underlying presumption is that high efflux temperature or velocity from industrial facilities may cause air disturbances via exhaust plumes. Two hazards were identified during brainstorming sessions by members of the safety risk analysis team. The first hazard recognized turbulence that may be associated with plumes that could result in possible airframe damage and/or negative affects on aircraft stability in flight. The second hazard discussed was the possible adverse effects of high levels of water vapor, engine/aircraft contaminants, icing, and restricted visibilities produced by these plumes. These hazards taken individually or cumulatively, could possibly result in the loss of the aircraft or fatal injury to the crew, as well as substantial damage to ground facilities. The SME team considered these situations to be most critical for general aviation (GA) aircraft flying at low altitudes during the takeoff and/or landing phase when an aircraft is in close proximity to an airport. The safety risk analysis team performed their analysis of the predictive risks associated with the plumes and determined the effects of the hazards as low, or in the green section of the risk matrix.*

A copy of the full report is attached to this letter.

The consequences of even one aircraft being upset by the thermal plumes and resulting in incident or accident could affect the lives of the aircraft occupants and people on the ground. Such an unfortunate occurrence would undoubtedly lead to attempts to restrict operations at the airport, or worse, attempts to close the airport.

In closing, we again respectfully request that the Commission reject approval of this project. While we clearly understand the need for development of energy to serve the public, we recommend another location that will not have a detrimental safety impact on aircraft operations in the Bay Area and at Hayward Executive Airport specifically.

Sincerely,

Bill Dunn
Vice President
Airports

Attachment