ORIGINAL

June 23, 2010

DOCKET
09-AFC-3
DATE JUN 23 2010
RECD. JUN 30 2010

California Energy Commission
Media and Public Communications Office
1516 Ninth Street, MS-29
Sacramento, CA 95814-5512

Attn: Mr. Craig Hoffman, Project Manager

Re: ***CEC Docket 09-AFC-3, Mariposa Energy, LLC-***
Workshop June 30, 2010,
1:15 pm

Dear Commissioners,

In accordance with the California Code of Regulations, Title 20, section 1211,1212, I herein make comment to the above captioned Workshop, and submit the following information/evidence to assist the California Energy Commission (CEC) in its deliberations regarding the licensing/certification of the above project. Attached please find an original and eleven copies of this correspondence.

On February 23, 2010, I met with the Federal Aviation Administration (FAA) officials at their Headquarters, Washington, DC to discuss the issue of air emissions (plumes) from industrial sources with respect to their effects on aviation. At the meeting, the FAA distributed a document entitled *AOSC (Airport Obstruction Standards Committee) Exhaust Plumes Initiative*, which announces in fact the FAA has initiated a thorough evaluation of the science around exhaust plumes as it relates to aviation safety, dated Sept. 2008. The study will address many outstanding safety issues and concerns that have been identified by others, including the United States Navy, Miramar Marine Air base, the United Kingdom, Australia and others. The rationale for conducting the study, according to the FAA, is due to the air safety concerns expressed not only in the United States, but worldwide. Results from this comprehensive study are expected to be available by the fall of 2010, and submitted to the AOSC for review (I have herein attached a copy of the AOSC Exhaust Plume Initiative for your convenience). During the meeting, I made a PowerPoint presentation which ran about thirty minutes. That presentation can be seen at web link:
http://www.ctcombustion.com/oxc/20100223-FAA-Pietrorazio-Web.htm

I have had considerable dialogue with the FAA on this subject for the past ten years, as an advocate for airport safety. Indeed, it was that involvement that caused the FAA to commission a "risk analysis" on this subject, the report dated January, 2006. The analysis is titled *Safety Risk Analysis of Aircraft Overflight of Industrial Exhaust Plumes.*
As CEC staff is aware, the above risk analysis identified two hazards to aviation caused by industrial plumes. As a result of these findings, the analysis Report recommends avoidance of aircraft overflight at less than 1000 feet above the top of the object, or

stack(s) and cooling towers. The above Plume Initiative study focuses on these hazards and other potential hazards attributable to industrial plumes, as bulleted in the AOSC document.

I believe, in the interests of flight safety and airport utility, the CEC should withhold issuance of certification for any industrial plant having major air emissions and sited in the vicinity of a public use airport, until the *AOSC Exhaust Plume Initiative* findings are released by the FAA, which would allow CEC to incorporate and reflect those findings in its decisions. It is my understanding that three major airports serve the Greater Bay Area, as well as several General Aviation airports, particularly Byron Airport.

This information is provided in the same spirit which the Commission welcomes public comment and participation.

Thank you for your kind attention.

Respectfully,

Raymond Pietrorazio

40 Whittemore Road
Middlebury, CT 06762

Subscribed and Sworn to before me, a Notary Public, in and for County of New Haven and State of Connecticut, this 24th day of June 2010

Edith F. Salisbury
Notary Public
my commission Expires 11-30-2011

AOSC Exhaust Plumes Initiative

From: AOSC

To: Mr. Pietrorazio

Date: February 23, 2010

Background

- September 2008 – Aviation Safety (AVS-1) asked to have this issue assigned to the Airport Obstruction Standards Committee (AOSC) to be evaluated.
- Initiated action to have a thorough evaluation of the science around exhaust plumes as it relates to aviation safety with a performance time of up to 18-months
- Incremental data to be provided as research is conducted over performance period
- Expect results from evaluation to be completed by Fall 2010 and submitted to the AOSC for review.

AOSC Specific Tasks Requested

1. Determine the impact of plume induced turbulence in different atmospheric conditions and winds.
2. Identify and review analysis of plume issues (e.g. EPA, OSHA,..)
3. Examine the potential impact to both aircraft and aircrew of repeated exposure of flying through plume effluent.
   - Evaluate the chemical content of a smoke plume effluents allowed by the EPA and OSHA regulation
   - Evaluate the aircrew risk level consistent with the EPA and OSHA norms for allowed repeated exposures to chemical contaminants.
   - Evaluate the potential effect on an airframe and engine performance consistent with aircraft manufacture's specifications.
4. Examine the obscuration effect of plume-induced clouds.
   - Ash and soot particles in exhaust plumes may act as obscuration or may induce condensation.
5. Draft a report of the impact of vertical plumes and exhaust effluent on aviation safety.

Possible Next Steps

- AOSC conduct an initial review of findings provided and suggest next steps.
- AOSC to coordinate finding with appropriate FAA Organizations and stakeholders as appropriate.
- AOSC to assess if additional studies are necessary

- Mitigations (if appropriate) will be determined by the results of the study