

DOCKET

09-AFC-3

DATE DEC 14 2009

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December 14, 2009

VIA E-MAIL (c/o CHoffman@energy.state.ca.us)

CEC Commissioners
c/o Craig Hoffman – CEC Project Manager
Siting, Transmission and Environmental Protection Division
California Energy Commission
1516 Ninth Street, MS-15
Sacramento, CA 95814

Re: Mariposa Energy Project
CEC Docket #09-AFC-03

Dear Commissioners,

As vice-chair of the Contra Costa County Airport Land Use Commission, I write this letter independent from the commission to follow up on a few points in our commission's letter of November 30, 2009.

1. Attached to this e-mail is an enlarged copy of the wind rose for the Byron Airport for use with our Information Request #4 in our letter of November 30.
2. For our Information Requests #2 and #4, it would be helpful to me if you could provide your analysis not only for the type of plane used by Mr. Cathey (as per Information Request #3), but also for a helicopter, a sail plane (glider), and an ultralight (trike type). (This additional analysis does not have to be done for Information Request #3.)
3. With regard to our Information Request #6, the Applicant presented information at our November 5, 2009 meeting indicating that the temperature of the plume cooled to the ambient temperature at an elevation of 1,000 ft. This relatively rapid cooling suggests that one major cooling component might be radiation cooling through the emission of infrared radiation. Such radiation, if present, could be absorbed by the polymer material used in the wings of most ultralight aircraft (polymers are long chain molecules, and therefore tend absorb infrared radiation). I think it would be helpful to us if your technical staff could explain to us what mechanisms are involved in cooling the plume (radiation cooling, convective and diffusive mixing of ambient air, etc.) and the amount of energy/power dissipated by each mechanism. If your technical staff can also

make an assessment as to the potential impact on the polymer wings of ultralights, that would be helpful.

4. As with regard to our Information Request #6, has your technical staff every looked at a plume using an infrared imaging camera or night vision camera? If so, photographs of relevant plumes would be helpful.

5. With regard to our Information Request #7, in power plants similar to Mariposa that the CEC has permitted, has there been any observation of elevated levels of dead birds around such power plants, of birds of prey circling around such power plants, or of any type of unusual bird activity around such power plants (and the nature thereof)? Has the CEC ever actively sought such information?

6. With regard to our Information Request #7, a Google search for birds and power plants found the following YouTube video of birds circling a power plant plume in Anchorage Alaska:

“Birds Attracted to Power Plant”

<http://www.youtube.com/watch?v=sJxTzAjeEbk>

The activity seen in the video meets the threshold for triggering an investigation as to whether the activity constitutes a bird strike hazard. (CalTrans Division of Aeronautics may wish to give its opinion as to whether the activity constitutes a bird strike hazard.) Using Google Maps street view, I was able to identify the power plant as the #2 power plant of Anchorage Municipal Light and Power. A further Google search located the following blog article which might explain the activity shown in the video:

“Those big black birds... Ravens in the City”

<http://www.farnorthscience.com/cold-quests/ravens-in-the-city/>

The blog article has not been authenticated. It alleges that ravens fly into Anchorage in the morning, feed at the dump and local fast food restaurants, and then play in the plume at power plant #2 in the afternoon and evening. The article references an Alaska State biologist, Rick Sinnott, whom the CEC could contact to authenticate the activity.

Ravens are relatively large birds, and large congregations in the air would pose a bird strike hazard. While there are no fast food restaurants in the Byron area, the Altamont Landfill is located approximately 3 miles to the west of the Mariposa project site. As I understand, the Altamont Landfill receives garbage from the counties of Alameda and San Francisco, and is relatively large. I could not readily find, on the Internet, any accounting of ravens at the Altamont Landfill. All that I could find so far on Raven accounts in the Altamont area was contained in the CEC's Report 500-2008-080 entitled “Range Management Practices To

Reduce Wind Turbine Impacts On Burrowing Owls And Other Raptors In The Altamont Pass Wind Resource Area, California.”

With that background, it would be helpful if the CEC technical staff could: (1) contact Mr. Sinnott to authenticate the above activity, (2) make an assessment of the raven population in the Altamont area (such as consulting with the Altamont Land Fill operators, its regulators, East Bay Parks Staff, and/or staff at the Bethany Reservoir), (3) ask Mr. Sinnott and/or other biologists if the ravens in the Altamont area would be able to detect or find the plume and if they would be tempted to play in it. With regard to the latter, Mr. Sinnott may be able to tell us the distances between the dump, fast food restaurants, and the #2 powerplant in Anchorage, and we may be able to compare these distances to the distance between the Altamont Landfill and the Mariposa site.

7. Finally, I searched for other public-use airports that allow ultralight flight operations. I found very few throughout the country. It seems that the FAA allows airport operators to ban or restrict ultralight operations, and most do. (Most public use airports indicate on their websites that an ultralight operator has to seek prior permission from the airport operator to land at the facility, which indicates that regular operations are not permitted.) As such, it appears that the Byron Airport is one of the very few public-use airports that allow ultralight operations. When the County built the Byron Airport, it took over private airpark for ultralights and sail planes (gliders), and the County promised that those operations could continue at the public-use airport. This, I think, explains why Byron is one of a very few public-use airports that allows these operations.

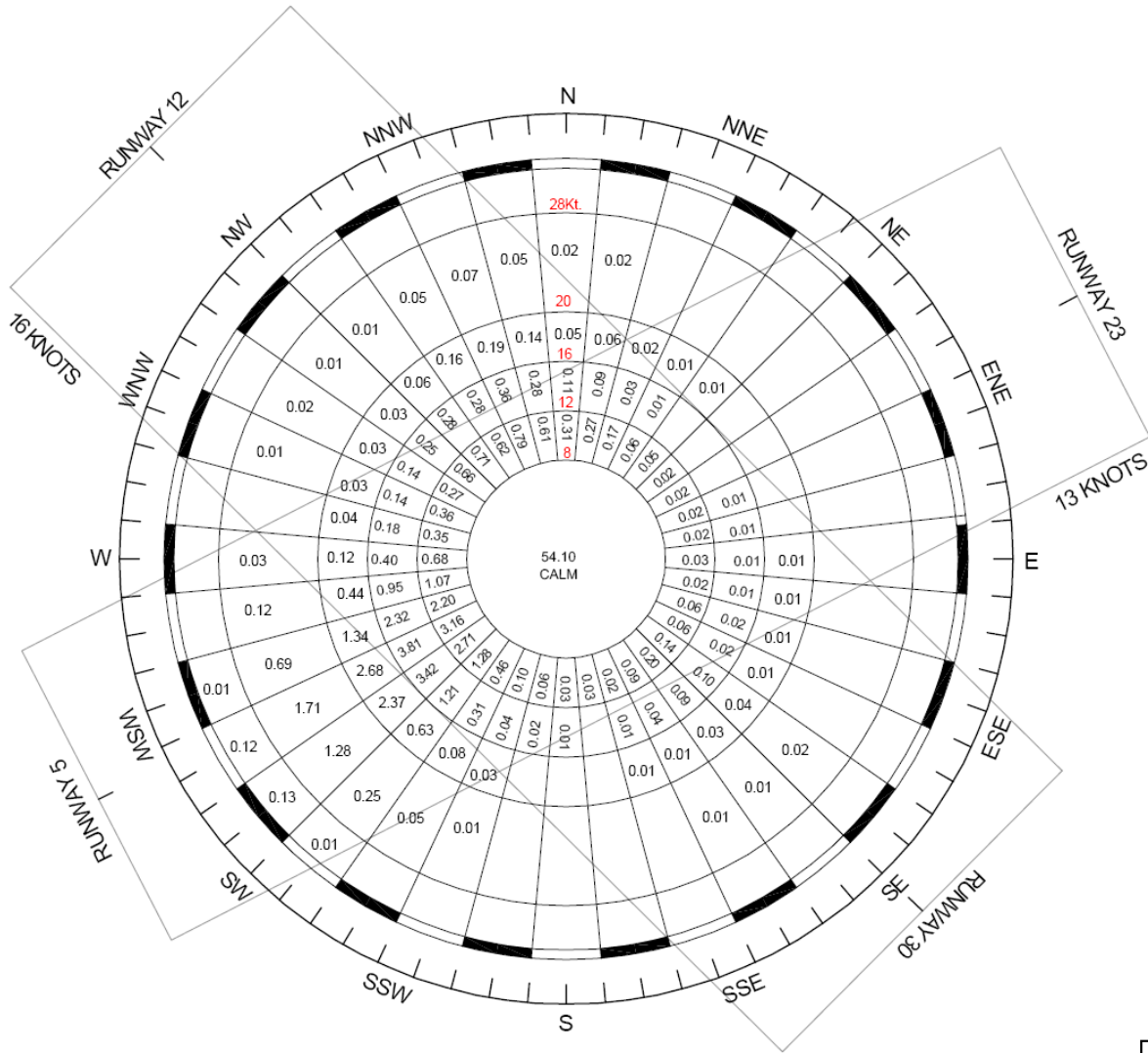
Sincerely,

/ Hal Yeager /

Hal Yeager

Cc: Lashun Cross, CCC-ALUC

For distribution to the other ALUC Commissioners



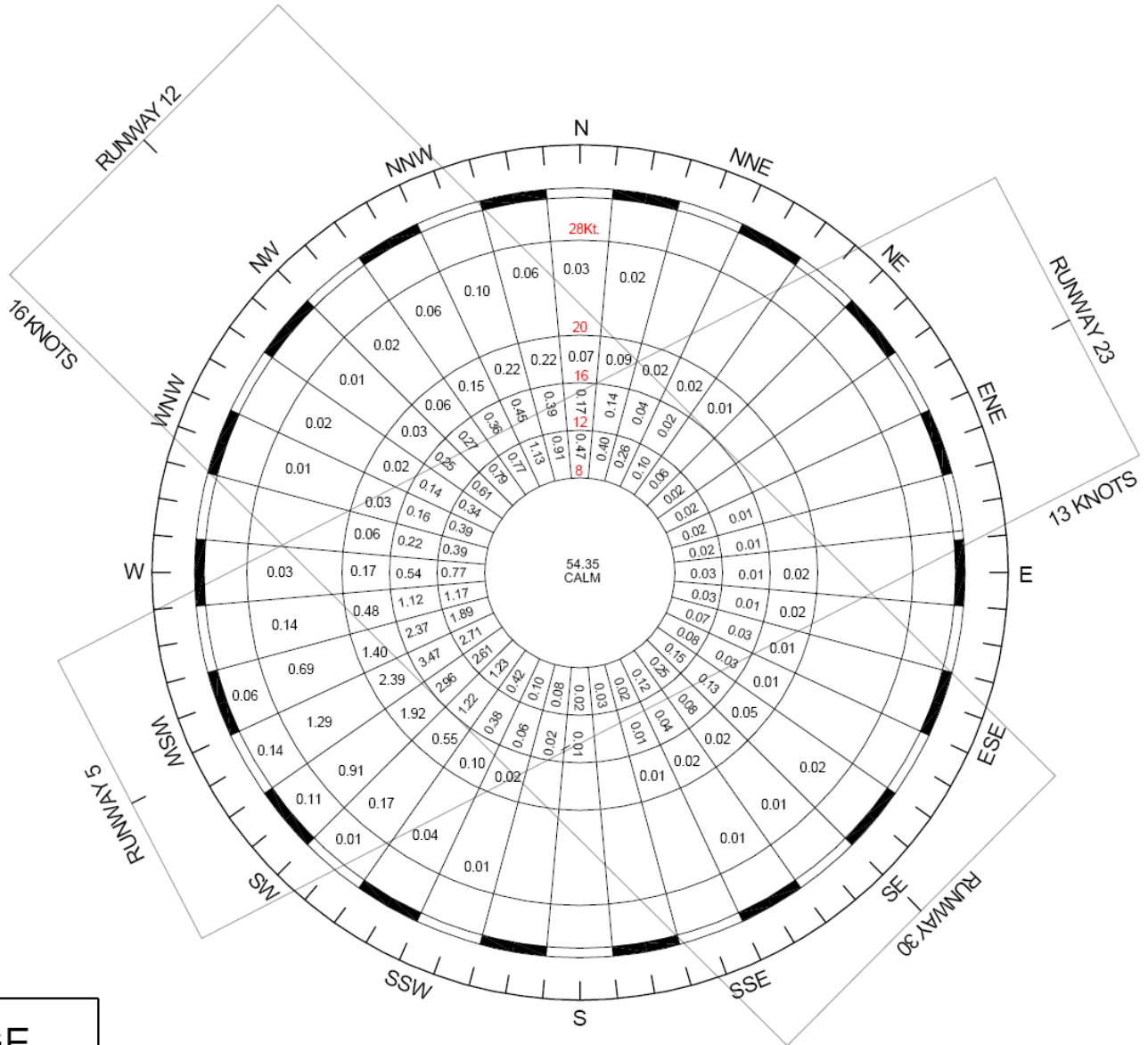
24-HOUR DATA
(18,809 Observations)

Runway	12-30					
5-23	Crosswind Component (knots)	0	5.0	10.5	13.0	16.0
	0		52.12%	72.46%	80.59%	89.42%
	5.0	77.90%	89.95%			
	10.5	95.41%		99.38%	99.63%	99.77%
	13.0	97.72%			99.81%	99.91%
16.0						

WIND CO\

March 22, 1990 -

Source: On-Site Wii



AVERAGE

April 25, 1991
 rd Sensor

6:00 A.M. - 10:00 P.M. DATA

(12,533 Observations)

Runway	12-30					
5-23	Crosswind Component (knots)	0	5.0	10.5	13.0	16.0
	0		52.80%	74.46%	82.52%	90.95%
	5.0	74.65%	88.44%			
	10.5	94.41%		99.23%	99.58%	99.77%
	13.0	97.25%			99.78%	99.89%
16.0						