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Cc: tsdale.donna@gmail.com
Subject: Pattern Energy Ocotillo Wind Energy Facility
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Attachments: image004.png
image003.png
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Havas Colling Windturbine.pdf

Dear Board of Supervisors,

My name is Samuel Milham. I am a semi-retired physician epidemiologist with 30 years experience in studying the health effects of electromagnetic fields. I'd like to make you aware of the serious health problems caused by wind turbines. I have recently studied the electrical pollution caused by wind turbines in the Palm Springs CA and Boulevard CA areas. Wave forms and harmonics from Palm Springs are shown in a paper by my colleagues Magda Havas and David Collings (att) on page 7.

Here are some spectra captured last month on the Manzanita Reservation near Boulevard CA. The spectra prove that the Campo wind farm and the utility is the source of this electrical pollution since the sine waves are at 60 Hz. The spectra should only have a bar at 60 Hz. The other bars are harmonics with shouldn't be there. At the Tribal Headquarters the ground voltage is 7.3 volts (3.6 +3.7) in the red data block.

The turbines also generate infrasound which has been shown to cause health problems as far as 3/4 of a mile from the blades. The problem with the electrical pollution comes from the inverters and controllers which change the generated electricity to grid frequencies. The harmonics and transients generated by the inverters are called dirty electricity by the utilities. Dirty electricity is a potent carcinogen and causes most of the diseases of civilization. See my book *Dirty Electricity* and visit my website for more information, for my CV and for contact information: www.sammilham.com.

My recommendation is that wind turbines should not be sited within 3/4 of a miles of homes, and that it would be prudent to delay wind farm construction including the Pattern Energy Ocotillo Wind Energy Facility until the utilities and the manufacturers can solve their electrical pollution problems. Southern California Edison and other utilities now dump nearly 80 percent of their delivered electricity into the earth for return to the substations. In my opinion this would cause serious health problems for Ocotillo residents.

Respectfully submitted, Samuel Milham MD, MPH





