Penny Melko
21848 Ferncuko Street
Tehachapi, CA 93561

July 12, 2011

Cal/EPA
1001 I Street. 2nd Floor
Sacramento,, CA 95814

Dear California Energy Commission,

I was mortified to read in the news that Edison and the California PUC have pushed aside the will of the residents of Chino Hills through lawsuits and also pushing Tehachapi residents into a battle against transmission lines. Apparently, you are unaware there is tremendous opposition to any more "industrial renewable energy development complexes." Eastern Kern County residents, including me have protested our County supervisory members to stop any more wind or solar facilities because of the destruction to our wildlife that will last in perpetuity, their awful noise and night glare from strobe lights and red beacons. Rezoning agricultural land that can feed us for intermittent wind or solar towers is unacceptable and beyond carelessness.

I was a vendor who respected the energy industry for 13 years of my profession career. Like the rest of the world I looked up to the industry's ability to lead the way and keen vision of the future. What has happened that you have fallen off the wagon and chose to compromise your ethics and reputation by pushing such destructive technologies?

Our country is rich in genius talent. Yet, you stand behind primitive wind technology that have propellers that rotate at 200 miles per hour at their tips without a "protective barrier" to prevent endangered, migrating and unsuspecting birds from being chopped up.

To make a point, conceptualize going to the zoo and what you see are cage-sized wind turbines and transmission lines in each aviary. What would be your first reaction? The birds fly near the blades and their wings, beaks, heads and feet get chopped off. The same theme plays out in the open skies when birds or bats and turbines meet. It's difficult to imagine that people as intelligent and observant as energy executives would exhibit such a lapse of good judgment. However, this is exactly the case with Edison and CPUC.

HAND GLIDING ANYONE?

BIRDS

Wind Power Could Kill Millions of Birds Per Year by 2030.

Washington, D.C., February 2, 2011, American Bird Conservancy (ABC)

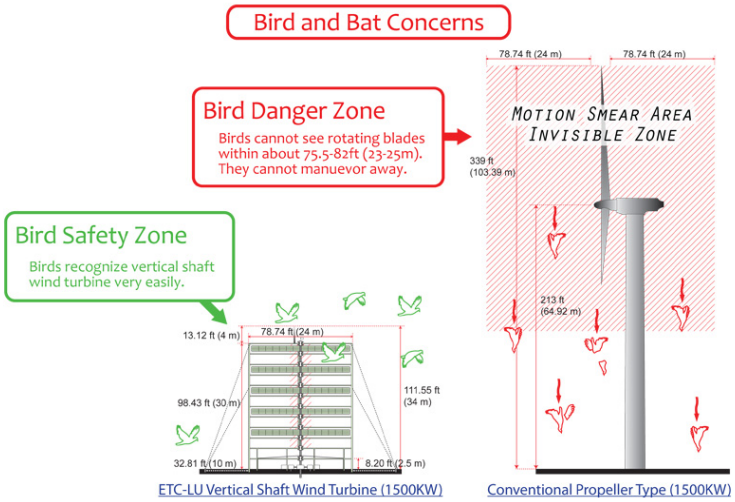
According to the most respected conservations groups "We are plunging head-long into wind power, but so far, very few studies have been conducted that show what scale of impact it will really have on birds," said Mike Parr, ABC's Vice President.

Wind farms are also expected to impact almost 20,000 square miles of terrestrial habitat by 2030, some of this critical to threatened species.
http://www.abcbirds.org/newsandreports/releases/110202.html

FACT SHEET ON ALTAMONT PASS BIRD KILLS

As an environmental organization, the Center for Biological Diversity supports the development of alternative energy sources as a way to reduce our impact on the environment, including reducing greenhouse emissions and protecting wildlife habitat. However, some wind power facilities, such as the Altamont Pass Wind Resource Area (APWRA) in eastern Alameda and Contra Costa Counties, California, are causing severe environmental impacts to raptor populations due to bird kills from collisions with turbines and electrocution on power lines. We have a strong interest in making wind power cleaner and believe there are numerous changes that could be easily implemented at Altamont Pass by the wind power industry to significantly reduce these massive raptor kills.

UNACCEPTABLE NUMBERS OF BIRDS OF PREY ARE KILLED AT WIND TURBINES The APWRA was established in 1982 and contains 5,400 wind turbines. The APWRA has the highest numbers and rates of raptor kills of any wind facility in the world. The bird kill fiasco at Altamont Pass is a result of poor planning that allowed wind turbines to be built along a major raptor migration corridor in an area with high wintering concentrations of raptors and in the heart of the highest concentration of golden eagles in North America. Wind turbines at Altamont Pass kill an estimated 880 to 1,300 birds of prey each year, including up to 116 golden eagles, 300 red-tailed hawks, 380 burrowing owls, and additional hundreds of other raptors including kestrels, falcons, vultures, and other owl species. The APWRA is an ecological sink for golden eagles and other raptor species and may be having significant impacts on populations of birds that are rare and reproduce infrequently. These astronomical levels of raptor mortality continue unabated, due in part to the failure of federal and state wildlife protection agencies to take any regulatory action. Bird kills at Altamont Pass occur in violation of federal and state wildlife protection laws, including the Bald Eagle and Golden Eagle Protection Act, Migratory Bird Treaty Act, and numerous California Fish and Game Codes. The wind power industry has been aware of the magnitude of the impacts to birds of prey at Altamont Pass since at least 1988, when the first of numerous studies of raptor mortality was published. To date, the industry has not implemented a single meaningful mitigation measure to reduce raptor kills or to compensate for removing significant numbers of birds from populations of imperiled species. In fact some efforts, such as the rodent control program at Altamont, have actually increased the risk to raptors while threatening endangered species such as the San Joaquin kit fox, California red-legged frog and California tiger salamander. Recent research by the California Energy Commission has shown the mortality risk to raptors at Altamont Pass has significantly increased over the past 15 years.
http://www.biologicaldiversity.org/campaigns/protecting_birds_of_prey_at_altamont_pass/pdfs/factsheet.pdf



GOLDEN GATE AUDUBON SOCIETY
Avian Mortality

Golden Eagles, named for the golden feathering at the nape of their necks, are majestic raptors that can be found throughout most of California and much of the northern hemisphere. California protects these magnificent raptors as both a species of special concern and a fully protected species, making it illegal to harm or kill them. Golden Eagles are also protected under the Bald and Golden Eagle Protection Act.

Golden Eagles typically prefer open terrain, such as the rolling hills of eastern Alameda County. The open grasslands, scattered oaks, and bountiful prey make this area ideal

habitat for Golden Eagles. Today, it supports the highest-known density of Golden Eagle nesting territories in the world.

Conservation Issues

Every year, an estimated **75 to 110 Golden Eagles are killed by the wind turbines in the Altamont Pass** Wind Resource Area (APWRA). Some lose their wings, others are decapitated, and still others are cut in half. The lethal turbines, numbering roughly 6,000, are arrayed across 50,000 acres of rolling hills in northeastern Alameda and southeastern Contra Costa counties.

The APWRA, built in the 1980s, was one of the first wind energy sites in the U.S. At the time, no one knew how deadly the turbines could be for birds. Few would now deny, however, that Altamont Pass is probably the worst site ever chosen for a wind energy project. **According to a 2004 California Energy Commission (CEC) report, as many as 380 Burrowing Owls (also a state-designated species of special concern),** 300 Red-tailed Hawks, and 333 **American Kestrels are killed every year. In all, as many as 4,700 birds die annually as a result of the wind turbines.**

Our Goals

Golden Gate Audubon is committed to reducing the levels of bird mortality at Altamont Pass to the greatest degree possible. In early 2004, Golden Gate Audubon joined the Center for Biological Diversity and Californians for Renewable Energy in a formal appeal to the Alameda County Board of Supervisors challenging the renewal of permits for 18 of Altamont's 20 wind farms in Alameda County. The permits were reissued without requirements to decrease the bird mortality caused by the turbines and without environmental analysis under the California Environmental Quality Act. Golden Gate Audubon requested an environmental review of the permitting and urged the county to mandate that the wind

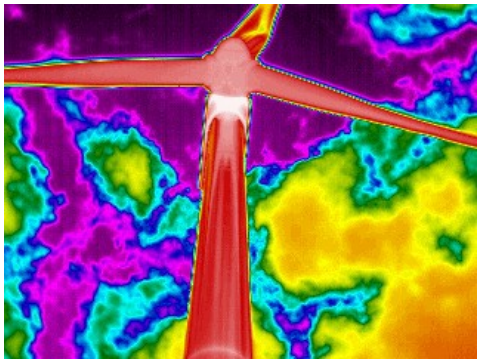
industry reduce bird mortality. We subsequently sued the county and wind companies in order to force a reduction in avian mortality at APWRA.
Reducing the kill entirely may not be possible, as long as the wind turbines continue to operate at Altamont. But we believe that significant progress can be made. The CEC estimates that wind operators could reduce bird deaths by as much as 50 percent within three years–the goal stated in our settlement agreement–and by up to 85 percent within six years–all without reducing energy output significantly at APWRA. These reductions could be achieved by removing turbines that are the most deadly to birds and shutting down the turbines during four winter months when winds are the least productive for wind energy, combined with some additional measures.
Golden Gate Audubon is working with Alameda County to ensure that the permits granted to the wind industry achieve reductions in bird mortality, in addition to other requirements that will help address the unacceptable bird kills at Altamont Pass over the long term. We also seek to support clean energy technologies, which help reduce the risk of global warming and its impacts on wildlife.
http://www.goldengateaudubon.org/conservation/birds-at-risk/avian-mortality-at-altamont-pass/

July 10, 2009 **PacifiCorp** – one of the largest electric utilities in the West – pleaded guilty today in Federal court in Casper, Wyoming,

to **unlawfully killing golden eagles and other migratory birds in the State.** The company, which does business in Wyoming as Rocky Mountain Power, was ordered to pay over $10.5 million for killing eagles and other protected birds.
http://www.fws.gov/mountain-prairie/pressrel/09-47.html

BATS

Everything you've ever wanted to know about bats from Fish and Wildlife Service:
http://www.fws.gov/midwest/greatlakes/windpowerpresentations/Kunz_Bats_at_Risk.pdf



Bats Interacting with Wind Turbines
http://www.bu.edu/cecb/wind/video/#4

A bat repeatedly investigates and briefly lands on the turbine tower while the rotor spins slowly.

Wind Turbines Give Bats the "Bends," Study Finds

August 25, 2008

Wind turbines can kill bats without touching them by causing a bends-like condition due to rapidly dropping air pressure, new research suggests.
Scientists aren't sure why, but bats are attracted to the turbines, which often stand 300 feet (90 meters) high and sport 200-foot (60-meter) blades.

The mammals' curiosity can result in lethal blows by the rotors, which spin at a rate of about 160 miles (260 kilometers) per hour.

But scientist Erin Baerwald and colleagues report that only about half of the bat corpses they found near Alberta, Canada, turbine bases showed any physical evidence of being hit by a blade.

A surprising 90 percent showed signs of internal hemorrhaging—evidence of a drop in air pressure near the blades that causes fatal damage to the bats' lungs with a condition called barotraumas.
http://news.nationalgeographic.com/news/2008/08/080825-bat-bends.html

IVANPAH SOLAR PLANT

Investment in Ivanpah Solar Plant is just as revolting. City people cannot see past the shrubs in a desert. However, deserts teem with life after the sun goes down. Fort Irwin has expanded their training facility twice in the last decade and is pushing the Mojave Desert tortoise toward extinction too. Adding Ivanpah solar project to the mix is another step toward their extinction as a species…and for what, old, has-been 20th century electric technology, that will keep the people on an expensive grid for the next 40 years?

Energy executive would have been my heroes if you invested stimulus money into preventing this solar plant and committed to fund research for local and rooftop technologies or another sustainable cause. GREEN = zero impact on the environment + manufactured with post-consumer materials + cheap + built to last.

Western Watersheds Project Sues to Stop Solar Power Towers

LOS ANGELES, California, January 18, 2011 (ENS) - An environmental group has filed a federal lawsuit against the Department of the Interior to halt construction of three solar power towers being built on public lands in the Mojave Desert.

The Western Watersheds Project claims the Ivanpah solar power plant is destroying 5.4 square miles of high quality habitat for the threatened desert tortoise in eastern California near the Nevada border.

"No project can be considered clean or green when it involves destruction of habitat for a species listed under Endangered Species Act on this scale," said Michael Connor, California director for Western Watersheds Project.

Desert tortoise in the Mojave Desert of California (Photo by Man of Mud)

The site, located near Mojave National Preserve, provides habitat for 19 other rare animal species, said Connor, including desert bighorn sheep, golden eagles and burrowing owls, and several rare plants. There are stands of barrel cactus, and centuries-old Mojave yucca on the site.

"The Department of Interior is tasked with siting energy projects in an environmentally sound manner. Instead it is allowing thousands of acres of important desert tortoise habitat to be bulldozed when there are alternative ways of generating power," said Connor.

The Ivanpah solar project is being built by BrightSource Energy, a private company based in Oakland, California. http://www.ens-newswire.com/ens/jan2011/2011-01-18-091.html

How much more abuse can this species take before collapsing under weight incessant development? Wind and solar complexes are not the only front where tortoises have been badly managed. Ft. Irwin Army base has expanded their facilities twice.

Army seeks to move more than 1,100 desert tortoises August 5, 2009 4:59 pm

As it prepares to expand training operations at Ft. Irwin in the Mojave Desert, the U.S. Army is again proposing to move more than 1,100 threatened California desert tortoises -- an unprecedented number of an endangered species that has not fared well during previous relocations...
http://latimesblogs.latimes.com/greenspace/2009/08/desert-tortoise-endangered-species-army-training-.html

August 21, 2008
LA Weekly
The Tortoise and the Tank Face Off at Fort Irwin…1200 tortoises

http://www.joedonnellywrites.com/features/the-tortoise-and-the-tank-face-off-at-fort-irwin/2/

The energy companies hire expensive attorneys to rebut facts and truth. It is quite sinister what money will buy including justification for mass extinction of our life support systems. For example, tortoise counts. Tortoises have been quietly picked out of the eastern Kern Mojave Desert for the last 5-6 years in

preparation for companies to convert the land to more sprawl, making the same mistakes of the last century. This is best termed as desert sterilization in preparation for build out once the energy infrastructure is complete. This scenario would be called progress, only if we could turn back the clock to 1950. The fact is that as much as many a man is convinced we're the supreme beings, we're not. We're a completely out of control species, sucking the life out anything of value or profit and to heck with our planet. Our planet is NOT renewable. Our dying ocean attests to this.

THE REAL COST OF WIND AND SOLAR ENERGY

Comparative Costs (Per Kilowatt Hour)

Coal	4 cents
Solar	22 cents
Gas (Natural)	9 – 10 cents
Taxpayer subsidies for wind and solar	$24 per kilowatt hour

Iron ore mine

Aluminum mine

Construction yard and new turbines going up.
(Each turbine requires 26-60 acres of land.)
Source:
http://www.powernaturally.org/programs/wind/toolkit/13_windpowerproject.pdf

Deforestation and grading on a grand scale. 10% of land use is for roads.

Evidence is surfacing that wind and solar may not be renewable ...”He concludes that it is a mistake to assume that energy sources like wind and waves are truly renewable. Build enough wind farms to replace fossil fuels, he says, and we could seriously deplete the energy available in the atmosphere, with consequences as dire as severe climate change.”
http://www.newscientist.com/article/mg21028063.300-wind-and-wave-farms-could-affect-earths-energy-balance.html?full=true&print=true

BIG ENERGY'S EFFIGY

Fallen Angel

GREED WINS OVER GREEN. CHING CHING. WIND AND SOLAR, ENERGY'S EQUIVALENT TO "ADWARE." HARVESTING THE WIND TURBINES TRASH ECOSYSTEMS BUT DO THE JOB THEY WERE CREATED TO DO FOR THE NEXT 40 YEARS.

Please think stewardship not behemoth industrial wind and sprawling solar generation. These are dinosaurs from the Enron era. The grid-mentality energy giants solicited Congress with hat in hand like paupers…this is all we have, it's the only option, it's inevitable…wah, wah, wah, we need corporate subsidies. They got the entitlement to march right through the most critical ecosystems, breaking and killing everything they encounter, all for electricity. In truth, if we don't cut CO2 greenhouse gases by 90% and become an army of stewards we are on a direct path with the same end as prehistoric dinosaurs, possibly in our own lifetimes.

Our people and our country have great potential to survive long-term if we change our intelligent monkey mindset, evolve quickly and can rally to bring in a new age of sustainable research and development…and get the corporations, lobbyists and profiteers out of the way. A prudent approach will develop sustainable

energy alternatives that will stand the test of time. There is at least 100 years worth of work and new jobs in cleaning up the land and ocean, cleaning up the mess left behind by blind greed.

It is my sincere hope that THIS PANEL AND ENERGY GIANTS reevaluate their investment portfolio and strategy for centralized energy delivery decides to rescind your plans to continue developing these destructive technologies.

Sincerely,

Penny Melko
Tehachapi, CA resident

Electrocuted birds under transmission lines littering my property and Tehachapi. Photos taken by me this weekend. (dead raven & duck)