After review of the East County Substation, Tule Wind, and Energia Sierra Juarez Gen Tie Project DEIR/ DEIS, I have the following comments.

D.2 Dudek map 6168-01 shows Golden Eagles within 6 miles and peninsular Big Horn sheep within less than 1 mile. The ESJ-B IO-10 shows no impact. How does undergrounding of overhead power lines put the wind turbines at no impact for sensitive birds or bat species colliding with wind turbines.

US Fish and wildlife states factors to consider when assessing effects. Species that are rare or cryptic; that migrate, conduct other daily movements, or use areas for short periods of time; that are small in size or nocturnal; or that have become extirpated in parts of their historical range will present particular challenges when trying to determine potential presence. One of these challenges is "**migration**," broadly defined as the act of moving from one spatial unit to another (Baker 1978), or as a periodic movement of animals from one location to another. Migration is species-specific, and for birds and bats occurs throughout the year. Such moments should be considered for all potentially affected species, including flying insects and species that migrate on the ground.

Wind developers need to determine not only what species may migrate through a proposed development site and when, but also whether a site may function as a staging area or stopover habitat for wildlife on their migration pathway. For some species, movements between foraging and breeding habitat, or between sheltering and feeding habitats, occur on a daily basis. Consideration of daily movements (morning and evening; coming and going) is a critical factor when considering project development.

Collision and Barotrauma

The services concerned about effects to birds and bats from collision and barotrauma caused by moving blades and wind wake turbulence. Collision likelihood for individual birds and bats at a particular wind energy facility may be the result of complex interactions among species distribution, **"relative abundance,**" behavior, visibility, weather conditions, and site characteristics.

Along with the observed direct fatalities from barotrauma, there may be lesser injuries, such as hearing impairment and other internal injuries that may allow the bats to fly or otherwise move away from the vicinity but would ultimately result in their death (Kozuka et al. 1997). As a result, estimates of bat fatalities from carcass searches may underestimate total fatalities.

Barrier Effects

"Barrier effects" can occur when a species' avoidance of wind facility results in decreased movement or an increase in energy use to circumvent the facility. (Goodale and Divoll 2009). Avoidance of the area

may also occur as a result of noise or habitat loss due to construction of roads and other structures associated with facility development (Fox et al. 2006). The level of barrier effect depends on species, turbine layout, size of wind facility, season, and the species' ability to compensate for losses in energy due to avoidance, among other variables (Langston and Pullan 2003; Fox et al. 2006). Though populations-scale effects currently have not been documented, scientist are concerned that **"barriers"** between breeding and feeding areas may have significant effects (Fox et al 2006; Goodale and Divoll 2009; Drewitt and Langston 2006). The combined barrier effect of multiple wind facilities is also a concern as wind energy development becomes more prevalent (Drewitt and Langston 2006). The barrier effect has been documented fairly extensively in several offshore wind projects (Guarnaccia and Kerlinger 2007) where modified behaviors by various bird species have been recorded at distances of between 100 m and 3 kilometers from turbine arrays (Drewitt and Langston 2006; Exo et al. 2003; Desholm and Kahlert 2005; and Percival 2001).

Habitat loss and degradation

Wind project development results in direct habitat loss and habitat modifications, especially at sites previously undeveloped. Many of North America's native landscapes are greatly diminished or degraded from multiple causes unrelated to wind energy. Important reminiscence of these landscapes are identified and documented in various databases held by private conservation organizations, state wildlife agencies, and, in some cases, by the service. Species that depend on these landscapes are susceptible to further loss of habitat, which will affect their ability to reproduce and survive. While habitat loss due to footprints of turbines, roads, and other infrastructure is obvious, less obvious is the potential reduction of habitat quality.

Habitat Fragmentation

Habitat fragmentation separates blocks of habitat for some species into segments, such that the individuals in the remaining habitat segments may suffer from effects such as decreased survival, reproduction, distribution, or use of the area. Site clearing, access roads, transmission lines, and arrays of turbine towers may displace some species or fragment continuous habitat areas into smaller, isolated tracts. Habitat fragmentation is of particular concern when species require large expanses of habitat for activities such as breeding, foraging, and sheltering.

Noise

Turbine blades at normal operating speeds can generate levels of noise beyond ambient background levels. Construction and maintenance activities can also contribute to noise levels by affecting communication distance, an animal’s ability to detect calls or danger, or to forage. Noise associated with developments can also cause behavioral and/or physiological effects, damage to hearing from acoustic

over-exposure, and masking of communication signals and other biologically relevant sounds (Dooling and Popper 2007). Some birds are able to shift their vocalizations to reduce the masking effects of noise. However, when shifts don't occur or are insignificant, masking may prove detrimental to the health and survival of wildlife (Barber et al. 2010). Data suggests noise increases of 3 dB to 10 dB correspond to 30 percent to 90 percent reductions in alerting distances for wildlife, respectively (Barber et al., 2010).

Indirect Effects

Wind development can also have indirect effects to wildlife habitats. Indirect effects include reduced nesting and breeding densities and the social ramifications of those reductions; loss or modification of foraging habitat; loss of population vigor and overall population density; increased isolation between habitat patches, loss of habitat refugia; attraction to modified habitats; effects on behavior, physiological disturbance, and habitat unsuitability. Indirect effects can result from introduction of invasive plants; increased predator populations for facilitated predation; alterations in natural fire regime; or other effects, and can manifest themselves later in time than the causing action.

Source USFW website: www.usfw.gov

It is my opinion that ESJ-BIO-10 has unknown impacts that could be class I due to the presence of Golden Eagles, Bats, and Peninsular Big Horn sheep in the project vicinity. The wind turbines will require new roads and 100 feet to 200 feet clearance around the base of each wind turbine as stated in the Fire Protection Plan for the Tule Wind Project. This would create more loss of habitat and potentially attract raptors into cleared areas, bringing them into close proximity of the wind turbines and into the rotor swept area creating a potential for injury or death. The wind turbines should be evaluated separately from the undergrounding of the overhead lines. The project is located within or near the following conservation areas Carrizo Gorge wilderness, Jacumba Mountain Wilderness, Table Mountain ACEC, and Inko- Pah ACEC where these species live.

BIO-10d mitigation states minimize Turbine lighting however ECO-VIS-4 & Tule-VIS-4, ECO is rated Class 2 Tule is rated Class I states" The project would create a substantial new source of light or glare that would adversely affect day or nighttime use in the area". The County has requested from the project managers, a lighting plan incorporating the use of shaded or shielded lights during construction and on all facilities. However, the Fire Protection Plan for the Tule Wind Project states PDF-15 electrical collection and transmission system and turbines will include the required FAA and CAL Fire lighting and markings. This would greatly increase the nighttime glare from these aviation lights as required by law and would make BIO-10d ineffective.

D. 3 visual impacts.

ECO-V I S-3 & Tule-V I S-3 states" The project would substantially degrade the existing visual character or quality of the site and its surroundings" is rated class I. This would seriously downgrade many property values as they were appraised and purchased for their visual quality. This would also downgrade its visual quality for recreational use. Many people visiting the backcountry come to the area for its scenic vistas, open spaces, and unique visual appeal.

ECO-VIS-4 & Tule-VIS-4, ECO is rated Class 2 Tule is rated Class I states" The project would create a substantial new source of light or glare that would adversely affect day or nighttime use in the area". The County has requested from the project managers, a lighting plan incorporating the use of shaded or shielded lights during construction and on all facilities. However, the Fire Protection Plan for the Tule Wind Project states PDF-15 electrical collection and transmission system and turbines will include the required FAA and CAL Fire lighting and markings. This would greatly increase the nighttime glare from these aviation lights as required by law and would kill the Boulevard area pending application for dark skies.

ECO-VIS-1 & Tule-VIS-1 is rated class I and states "The project would have of substantial adverse effect on scenic vistas". The project would substantially downgrade property values and downgrade recreational use as previously stated.

KOP 1, 2, and 5 does not show the Sun Rise Power Link and the clearance of vegetation around substation for compliance of PRC codes. KOP does not show clearance of vegetation around substation for compliance PRC codes and I am also concerned about the removal of existing trees at the site, especially oak trees. San Diego County is experiencing impacts to its existing oak trees from the gold spotted oak Borer. This is a major concern for the area as there is a significant decline of oak trees in the County. This potentially could create seed stock shortages for future oak tree propagation. Any healthy oak tree removal would be a significant impact. K0P 10, 19, 20, 21, and 22 does not show vegetation removal as stated in the Fire Protection Plan for the Tule wind project. This would create a different visual simulation than what is shown in the document.

D.7 Cultural_Paleontology.

I have serious concerns with this section as there are 102 new sites, 29 not evaluated, and 2 unknown no records. With the number of new sites, the area should be reevaluated as it could be significant if you take of view from all the sites within the area. Many of the sites had been evaluated singularly and not as a whole. Looking at the sites individually may appear to be not significant. However, as stated,

looking at the sites as a whole in the project area could potentially change this rating. The section states that the sites could be potentially significant and sites being unique archaeological resource. The section also talks about developing and implementing a historical properties and cultural resource treatment plan. What is that plan? In my opinion this fall short of what is needed for these sites. All the cumulative impacts, from multiple projects in the area, have greatly impacted these cultural sites. Further, I believe that further studies should be conducted with collaboration from Native American Tribes and Historical Society Groups. McCain Valley has had some limited surveys and studies, but has not been studied thoroughly. Surveys of the project area at most times are limited in findings due to terrain and vegetation cover. I myself have done surveys in the area after previous surveys and have found new sites within that area. The reason for the new finds was because of change of vegetative cover. Once these cultural resources are impacted, it changes the timeline data and these resources would be gone forever. This would be too high of a price to pay for lost history and lost cultural resources, not to mention the lost educational opportunities.

D. 8 Noise.

Noise levels would increase ambient noise from 2 to 3db or greater in some areas. A 3db increase would be doubling of the noise level. Each decibel gain increases logarithmically. The noise would be continuous and not intermittent, such as a passing truck or jet aircraft passing through an area. The noise being continuous would have cumulative impacts to local residents in the affected area.Tule-NOI-4 Permanent noise levels would increase due to corona noise from operations of the transmission lines and other project components states impacts Class II.D.3-32 states noise from wind turbine assuming all turbines installed at 1.5mw, the project would exceed maximum allowable noise limits for nighttime. If 3.0mw turbines are used, additional residents may be adversely impacted. MM-NOI-3 mitigation states a site specific noise mitigation plan will be developed. How do you evaluate impact to Class II without the plan already developed? What brand of turbine will be used? Every brand has a different noise rating as well for each model. The noise from turbine would also be continuous and would have cumulative impacts on residents. Again, noise from the turbines would be continuous and would have cumulative impacts on residents. The noise would also create impacts on recreational use as visitors come to the area for the quiet. The impact rating should be reevaluated as it can be potentially class I impact.

D. 10 Public Health and Safety.

D. 10 address EMF, but do not address potential long-term exposure health effects to residents. There should be a condition placed on project that if there is a spike in health problems in the area the causal agents will be removed. Furthermore, ongoing studies should be conducted throughout the life of the project studying the health of residents within the project area. Any health conditions that arise as a

result of the project. The companies and approvers of the project will compensate all cost incurred by individual suffering from health conditions.

D. 14 Public-Services and Utilities

D. 14-2 shows solid waste as San Diego County. There are no landfills within the project area. All solid waste is hauled off by private companies or dumped along roadways and or private property. Boulevard fire department does not provide advanced life support (ALS). Advance life support is provided by American Medical Response (AMR) contracted through San Diego County. The nearest advance life support is located in Campo and provides services to East County providing service to 8+ communities. The next closest advanced life support is in the community of Alpine. Campo response is 20+ minutes to Boulevard with Alpine being 35+ minutes if available. During periods of high demand Advance life support can be an hour plus response time, including air ambulance. Desert road season taxes emergency services and increases response times as does inclement and weather. The project area is located within the Interstate 8 corridor, a major highway running East to West and is a majority of calls for local emergency services. A typical vehicle accident can involve up to three fire stations for up to two hours or more per incident. It is not uncommon to have multiple incidents on Interstate 8 simultaneously within 2 to 3 miles of each other.

D. 14-7 accurately states Jacumba Fire Station as a volunteer station, which was uncovered, for several years and currently the station is cover sporadically by volunteers. Coverage of the station ranges from 3 to 8 days a month. McCain Valley Camp is not a station and is an inmate prison camp. Inmate firefighters are trained at the minimum level of wildland fire. Currently, the inmate population levels fluctuate and inmate fire crews have been hard-pressed to maintain adequate staffing levels; this is a statewide problem for all state inmate camps. McCain Valley Camp is funded for five inmate crews with 17 inmates procure. The camp has had many periods of crew strength at 12 to 13 inmates per crew for 2009 and 2010. Crew strength has even dropped to 11 inmates on a crew which is a minimum before disbanding crew. The camp is not an all risk service as inmates are not trained at that level. Incident response is typically wildland fire, flood control, resource projects, and community service projects. Inmates are a manual labor force and follow directions from a fire captain and cannot work independently from the crew.

Community Service Area # 111 is no longer valid as it falls under San Diego County fire Authority' s Community Service Area # 135.

San Diego Sheriff Department Boulevard/Jacumba substation at 39919 Highway 84, Boulevard does not exist. The Sheriff substation is located at 39919 Highway 94, Boulevard.

D. 14-9 solid waste states that residential solid waste disposal is typically facilitated through the use of rural bin sites. These sites have been closed for several years as stated in final sentence. This is misleading as beginning of section states that County provides a service when they do not.

D. 14-19 MM-PSU-1a notification of utility service interruption states to notify public a power interruption. The majority of residents depend on Wells for their water supply, extended or multiple outages could create health and sanitation issues and also local residents would not be able to get local news or updates in the event of emergencies, as many areas cannot receive local radio stations. Satellite TV is how local residents pick up local info. In my opinion this mitigation falls short and does not mitigate the impact. This would also impact emergency services located within outage area.

D. 15 Fire and Fuel.

D. 15-5 Boulevard, Manzanita, and Jacumba are communities at risk, fire history over 50 years show 29 wildfires greater than 10 acres. States fire small either from lack of fuel or quick response. The response area within the project area traditionally had minimal foot traffic to minimal vehicle traffic with portions no traffic due to limited access. These response areas now will have infrastructure that could potentially increase fire activity. Boulevard fire department is shown covered 24/7, but does not address that the department is staffed by volunteers and reserves, and was not covered Christmas holiday 2010. It also does not address resource coverage during high call volume or when multiple major incidents are taking place within San Diego County, Statewide, or National. The document treats the Boulevard fire department as her sole dedicated department and hinges on resources always available. It also does not address the illegal border crossings and the number of emergency responses due to this activity, such as fires, medical aides, and rescues. The document addresses the declining fuel beds but does not state that this makes them more conducive to large devastating fires. The document addresses fire prevention and education but does not state plans when fire happens and impacts to emergency services due to equipment failure and or human factors. The document does not address the Jacumba fire station with hit or miss coverage which when covered is staffed by volunteers or reserves. The project area is served by volunteer fire departments with the closest paid staff station belonging to CAL Fire located on Tierra Del Sol. The document addresses the construction phase and talks about measures for fire during this phase, but does not address the increased emergency responses to emergency services such as traffic accidents, medical aides, and potential increase of wildfires during the construction phase. The document does not address the multiple projects that will be taking place at the same time in the area such as the border patrol Boulevard station construction and Sun rise power link projects. It also does not address the increased response time due to increased traffic and traffic control points because of construction. The roads in the area are narrow, two-lane rural roads paved with some

in the project area being narrow dirt roads. The document does not address areas not accessible by vehicular equipment and is only accessible by air or on foot. The document states the response of aerial resources but does not address the modify tactics that would need to be implemented due to the aerial hazards such as overhead lines and wind turbines. The document also does not address that when a fire happens the modify tactics fire service would employ such as perimeter control defined as waiting for the fire to come out of hazard area. This would only be successful in a no to low wind conditions. This would not be successful in a Santa Anna wind event. Tule/ECO/ESJ-FF-2 &3 show Class I impact and as not able to mitigate. This should be reason enough to deny project as San Diego is in a year-round fire prone environment. The County does not need more impact added to it as it has seen an increase in large devastating fires such as seen in 2003 and 2007.

D. 16 Social and Economic Conditions.

D. 16-6 states major industrial activities in Boulevard area are restricted by limited and vulnerable groundwater resources, lack of extensive infrastructure, distance to urban areas, zoning and land-use ordinance, as well as community preferences. The last point community preference should be noted as many residents choose to live here because of no industrial zones, the scenic views, the quiet atmosphere, and limited number of people in the area. It also should be noted the limited and vulnerable groundwater resources. These projects could seriously impact groundwater, which local residents are dependent on for drinking, fire protection, and sanitation.

ECO/Tule/ESJ-SOC-3 project construction and operation would cause decrease in property values. States Impact class not adverse. In my opinion the following should be taken into consideration when deciding impacts as not adverse.

Chris Luxemburger study was based on a sample of 600 properties that sold in the windmill areas over a period of three years. The results, properties inside the windmill zones were more than double the days on the market than those outside, the sold price was on average, $48,000 lower inside windmill zones than those outside, and the number of homes not sold inside windmill zones was 11% versus 3% outside the zone.

Financial gain to developer and landowner/lessor should not be at the expense of neighboring property owner equity. Since the project developers and the ones approving the project claim property valued increase as not adverse they should be able to back it up with property value guarantees. This should be a requirement or condition. Verbal promises are meaningless and this needs to be a written

requirement or condition to back up this claim. The housing market has and is still suffering and does not need more impacts. Anymore devaluation of property values in the area would have a devastating effect on already struggling communities in the project area.

Property value guarantee should be based on the following: homeowner option to sell within 3 to 5 miles of wind turbines; based on certified appraisal process; measured against far distant comps and marketing periods; current value at time of option/sale; possible sale leaseback; bonding or adequate insurance, particularly when developer or owner has inadequate assets to guarantee probable range of value loss, insurance prepaid for project life; and decommissioning of turbines bonded; construction of replacement housing and relocation for reservation residents who will be disturbed.

I went to Iberdrola's website to look up the document used for their findings (Iberdrola Renewables, Inc. 2010a), and was unable to locate it for review. If this is based on Ben Hoen's thesis I submit to you a recorded interview from Ben Hoen." You might know about a property value guarantee. It's a dicey situation and complicated. **I think one of the things that often happens is that (wind) developers put our report forward and say, look, property values aren't affected, and that's not what we would say specifically.** On the other hand, they have little ground to stand on if they say we won't guarantee that."

Sources: Micheal S. McCann, CRA McCann Appraisal, LLC mikemccann@comcast.net

Recorded interview by Clif Schnieder April 12, 2010 – recorded interview available online.

D. 17 Environmental Justice.

The document uses statistics from U.S. Census report 2000, whereas they use U.S. Census, 2010 statistics elsewhere in the other sections. In my opinion 10-year-old statistics used in the environmental justice section are out of date. I am sure that there have been many changes in the area in 10 years. U.S. Census, 2010 statistics should be used to accurately reflect this section.

In conclusion, I urge you to use the no project alternative based on the comments and concerns that were addressed in this letter. Our countries energy goal is to reduce dependency on foreign oil. In our rush to develop renewable energy projects I have concerns that we are creating new dependencies and new ecological disasters. An example Mongolia produces 90% of the world's legal reserves rare earth metals specifically neodymium which is used to create (Nd2Fel14B) permanent magnets. An average of 44,000 pounds of Neodymium- based permanent magnet material is required for most large wind turbines. China currently controls the rare earth magnets in the world. Second concern is most of the companies are from out of country that develop and sell these renewable projects and third wind

turbines have not proved to be as efficient as were all led to believe. The wind turbines need to run at 30% efficiency in order to break even.

We have seen wind energy projects in the 1970s during the energy crisis. There are still remnants of these projects that shut down due to it not being economically viable and we were left with the turbine sites in poor condition and in disrepair or disarray.

The ESJ project is located in Mexico. This is a serious investment out of country with no guarantees that we will receive the power generated if Mexico decides they need it more. There are many claims from the developers that this will create new jobs for local residents. We have heard these claims many times from past projects in the area. This has not held true from the past performance. Some examples Sun Rise Power Link project currently in progress in our community has contracted to PAR an out-of-state company. We watch many of the trucks go by on a daily basis, displaying Missouri plates. In public meetings we have asked SDG&E why they have not employed local residents. Their answer is we are bound by Trade Labor Agreements. The current project developers promise the same things. They are from out of country and out-of-state and because of past track records more promises that will be more than likely broken. There is no mechanism in place to hold these companies accountable to the promises they make.

Our communities have suffered through many projects and yet more are forthcoming. The past projects have created damage to our communities and local residents leaving us to try and fix it. Example Q West fiber-optic project damaged the Jacumba pond fill pipe, the pond to date is currently dry as a result from damage caused by the project. Residents had driveways that were torn up during construction and after the construction company left many experienced sinkholes and sinking of their driveways. The driveways that were paved had trenches through their pavement then patched after construction very poorly. There are many more examples of damage from this project and other projects that took place in our communities. Generally residents wanting to make claims are told they need to fill out the proper forms and most times follow a complicated process. Most times, the process includes proof that the company caused the damage, which can be hard to do when people trust that the companies will make good and do not make photographic records prior to the construction. This creates a lot of frustration and anger within the communities. The companies generally are not held accountable as there is no mechanism in place to enforce accountability.

We typically are ignored because we are small in numbers and have limited financial resources. These companies have lobbyist, financial means, and public relation staff. If these projects are approved this will only open the door for more projects in our area. Currently there are several other projects in the works pending the outcome of this project. We are truly a David fighting against a Goliath. We value the resources in our area. We try to protect them for future generations. The federal government has been entrusted with this same responsibility. However, it seems that someone in government with the stroke of a pen or political agenda can change areas with protected designations, endangered species, protected species, and scenic vistas to a designation for industrial use.

We hear from these developers the citizens need for more power projects because of increasing demands for more energy. We do not hear the need to conserve. We also hear it is for the greater good and that we are so small that the impacts are not significant and therefore should go forward.

It is my opinion that if every structure had rooftop solar and small wind generation and distributive power versus transmission we could meet our renewable energy and conservation goals. By utilizing rooftop solar on all existing structures we would not need to develop projects in undisturbed ground areas. Many of these projects are scrambling to get these projects going because of deadlines on government subsidies and/or credits. My question is would these companies still pursue these projects without the government's help. If they are profitable as they claim they should be able to do these projects on their own. This seems to me that we will pay more in the long run in the form of rate increases and higher taxes for these projects. Currently in our area the electric power company asked for a rate increase in San Diego County because we did not use enough electricity. It appears to me that currently we are allowing means for utility companies to implement rate increases when we conserve.

In closing, I hope you take these comments and use prudence and due diligence when making your decision. We do not need another Gulf oil spill incident or environmental disaster. Thank you for allowing me to participate in this process.

Mark Ostrander

Jacumba Resident

43577 Old Hwy 80

Jacumba, Calif. 91934

clasictraclayer@att.net