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Sent: Monday, February 14, 2011 12:19 PM
To: catulewind@blm.gov; ECOSUB
Cc: Donna Tisdale; clasictraclayer@att.net
Subject: Analysis and Comments re: East County Substation and Tule Wind Projects

Attached is my analysis and comments for the East County Substation and Tule Wind projects. I am resending my analysis and comments, because my previous submission had an inaccurate date. This new submission is dated 02/12/2011.

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COMMENTS/ FACTS/ANALYSIS OF DRAFT ENVIROMENTAL IMPACT REPORT FOR EAST COUNTY SUBSTATION AND TULE WIND PROJECTS

BY HOWARD W COOK, 02/12/2011
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BACKGROUND

This document analyses and comments on the draft EIR for the Tule Wind Project and the Jacumba-Boulevard Substation Project as well as the multiple high voltage transmission connector and feeder lines involved with both.

The Tule Wind Project in the McCain Valley specifies 124 wind turbines, each one over 400 feet tall. This project also specifies its own 5 acre substation, a 5 acre operations and maintenance yard, a 5 acre concrete factory, new enlarged and enhanced roads, as well as connecting high voltage transmission lines and a connecting high voltage line to the Boulevard substation.

The Substation project specifies two major substations. First, a 58-acre Jacumba facility adjacent to the Mexican border, which will connect with various planned Mexican and US wind and solar projects. Second, an expanded, greatly enhanced Boulevard substation. They both specify multiple interconnections to each other and other high voltage transmission lines to the Tule substation and from the planned wind projects in Campo, the Jordan project, and several Indian land wind projects.

OVERALL COMMENTS

I attended both of the local project "informational meetings" at Jacumba on January 26, 2011 and in Boulevard February 2, 2011. They were both very strange meetings, because they did not have a specific agenda item in which the people in attendance could ask questions and comment on the key points of the plans and the "Environmental Impact Report". Instead, the Dudek Chair broke up both meetings and then asked each of those attending to ask individual questions of project personnel stationed around the room. The meeting design reflected a desire to get the meetings over quickly without direct questions and input from the floor. Both meetings were conducted top down, not like most serious high impact meetings held elsewhere in America where give and take is expected. **These were not valid meetings for this reason. The projects should be placed on hold until multiple true "open meetings" can be held locally.** After all, the next open meeting will be held 70 miles away in San Diego. Many people in this rural locale lack the resources to travel and park in down town San Diego on the multiple days likely to be required.

The reports were prepared at the direction of companies which are majority foreign owned. Recent experience, such as in the Gulf Of Mexico with British Petroleum, allow us to conclude that foreign companies do not have the same commitment to environmental protection as do local companies

who must answer long term for environmental errors or omissions. My analyses of both reports conclude that there are many glaring critical omissions.

The two projects at issue are interconnected. I am addressing The Tule Wind project first because it helps define the size and scope of the substations. In the same vein, I also suggest that the substation location and size along with the many environmentally destructive high voltage feeder lines envisioned, should wait completion of the approval process for all of the various wind and solar projects scoped. Too much is being rushed through all at once. This rush to energy industrialization threatens the quality of life in the East County area.

TULE WIND PROJECT

These comments and analysis of the Tule Wind development provide research data and analysis that causes us to recommend against this industrialization of the McCain Valley area.

The recreational and wilderness areas immediately adjacent to McCain Valley as detailed below are shockingly touched on only briefly in the report or not mentioned at all.

The Tule Wind project is centered around McCain Valley Road. The left hand, Western side of the road serves light ranching, OHV recreational, and a camp for troubled teens. The right hand, Eastern side of the road contains magnificent designated environmental areas and recreational assets. The Tule Wind report mentions McCain Road areas as a designated RMZ (Resource Management Zone) while largely ignoring the designated wilderness areas and recreational assets immediately adjacent on the right hand Eastern side and also at the north end of the road. McCain Valley Road provides the sole primary vehicular access to the immediately adjacent Carrizo Gorge dedicated Wilderness and the Sawtooth dedicated Wilderness areas. The road serves this same purpose for the higher elevation Western side of Anza Borrego State Park (the largest state park in the USA). In the case of the Sawtooth Wilderness Area, McCain Valley Road offers the only access of any kind (see the included BLM website and map information). These wilderness and recreational access and entry points and related recreational sites are well documented by a large quantity of recreational guides and books and the BLM's own literature and maps. Some of these publications will be detailed and quoted later herein.

The Wind contractor also fails to describe the overall impact of "Wind Power Industrialization" on the wildlife, scenic overlooks, campgrounds, trails, trail heads and other similar environmental and recreational assets in the adjacent Wildernesses.

The right Eastern side of McCain Road has short paths and short side roads leading to magnificent scenic overlooks of the desert below (Anza Borrego State Park, Carrizo Gorge, Jacumba Mountain and Sawtooth Wilderness areas). These reflect an escarpment 15 miles long that is similar to other scenic gorge areas such as the Grand Canyon, Royal Gorge, Kings Canyon etc. The escarpment is very precipitous, going almost straight down. Mc Cain Road is mostly unpaved, but passable by car. Tour buses, however, do not frequent it so it is not so well known. This awesome escarpment is not mentioned in the report as a key asset. The Tule Wind report once again fails to mention that the road is the only way to access the escarpment and Wilderness areas as quoted in the included BLM and other documents.

The Tule Wind Report specifies at least 35 wind turbine sites on the Eastern right hand side of the road and another 25 in close proximity (hundreds of feet) on the immediate left side. The Cottonwood campground is close to the end of road. The campground overlooks and is adjacent to the Sawtooth Wilderness and the Carrizo Gorge Wilderness. Hikers, campers, horseback riders and day visitors utilize Cottonwood campground. The specified immediately adjacent noisy whirring turbines are projected to surround the campground and would make it no longer practical for camping and day use. Keep in mind that the campground and McCain Road are the only means of visiting, hiking and horseback riding into The Sawtooth and Carrizo Gorge Wilderness areas. Lets not lose access to these large areas set aside for us to visit and enjoy as well as for plant and wildlife visitation and study.

The 35 Wind turbines, as well as the close in 25 previously discussed, each one over 400 feet high, will be clearly visible in Anza Borrego State Park and in the two Wilderness areas discussed. The blinking red lights atop the turbines at night will also clearly distract those in Anza Borrego State Park who go to the park to observe the stars, to enjoy the solitude and camp in the the many canyons off County Highway 2 in Anza Borrego State Park as I have myself.

This industrialization of McCain Road is also absolutely not compatible with the wildlife found in the valley and the adjacent wilderness areas. These are are described in BLM's own documents shown later. Wildlife found include bats, protected Golden Eagles and endangered Bighorn sheep.

So that readers unfamiliar with wind installations will understand the impact they would have on the McCain Road environment I am including the following descriptions found in nationally recognized documents (multiple equipment descriptions are provided since the Tule Wind report does not specify models or brands planned):

How big are the towers?

"Industrial wind turbines are not the benign little structures you might see in a schoolyard or behind someone's house.

The widespread GE 1.5-megawatt model, for example, consists of 116-ft blades atop a 212-ft tower for a total height of 328 feet. The blades sweep an area just under an acre. The 1.8-megawatt Vestas V90 from Denmark is also common. Its 148-ft blades (sweeping more than 1.5 acres) are on a 262-ft tower, totaling 410 feet. Also gaining use in the U.S. is the 2-megawatt Gamesa G87 from Spain, which sports 143-ft blades (just under 1.5 acres) on a 256-ft tower, totaling 399 feet.

Many existing models and new ones now coming out reach well over 400 feet high, with higher towers and extra-long blades designed to turn the generator in less-than-ideal sites.

The base of the steel tower is anchored in a platform of more than a thousand tons of concrete and steel rebar, 30 to 50 feet across and anywhere from 6 to 30 feet deep. Pylons may be driven down farther to help anchor the platform.

The gearbox—which transforms the slow turning of the blades to a faster rotor speed—and the generator are massive pieces of machinery housed in a bus-sized container, called the nacelle, at the top of the tower. The blades are attached to the rotor hub at one end of the nacelle. Some nacelles include a helicopter landing pad.

On the GE 1.5-megawatt model, the nacelle alone weighs more than 56 tons, the blade assembly weighs more than 36 tons, and the tower itself weighs about 71 tons, for a total weight of 164 tons. The corresponding weights for the Vestas V90 are 75, 40, and 152, total 267 tons, and for the Gamesa G87 72, 42, and 220, total 334 tons.

Besides the noise and vibrations such huge moving machines unavoidably generate, they must be topped with flashing lights day and night to increase their visibility.

So the footprint is less than 50 feet?

Hardly. First of all, new roads have to be built, or existing ones need to be extensively "upgraded." It requires more than an old dirt logging track to get a 150-ft blade, a

70-ton nacelle, or the huge crane needed to put it all together up a mountain. The road needs to be wide, straight, and very strong.
Several acres around each turbine have to be cleared as well. For best performance, the GE 1.5-megawatt turbine needs 82 unobstructed acres around it and the Vestas V90 needs 111. On a ridgeline, the sloping away of the land and the hope that the wind is always perpendicular to the line of the ridge mean that about 5 acres are actually cleared around each turbine. Access to the area around the turbines must be strictly limited because of physical danger.
A facility may also require a new substation or two, as well as new transmission lines.
The combination of all this—road building, extensive clearing, and the installed facility itself not only significantly degrades and fragments wildlife habitat but also has a serious effect on erosion and water flow, not to mention the aesthetics of a mountainside or open land and of course the visual intrusion affects the landscape for miles around". (end of general description)

The Tule Wind Report in it's "visual impact assessment section" says that the construction period will be "short term", yet the report in another place says that it will last for 12 to 18 months. The report in the "traffic section" estimates the construction period truck volume at 200 trips a day (Concrete mix trucks, construction haulers and the largest industrial cranes) They say that the construction periods, when complete, will end any interference with recreational use, wilderness access or enjoyment, yet we know by local experience with the wind farm on tribal land adjacent to Highway 8 that every turbine has been replaced since installation several years ago. Visual review of this site shows large discarded or replacement structures remaining strewn around the base of the turbines. Go underneath these turbines with the noise, vibration and fearsome proximity to lethal whirling blades while operating and you will understand that visitors will not want to visit and utilize the recreational and visitor assets (campgrounds, trails, trailheads, overlooks) currently in use. The wildlife will react similarly.

The Tule Wind project report in the "operation and maintenance impacts" section itself admits the following: "Given the height of the wind turbines, their placement on ridgelines, and the rural nature of the project site, the turbines may be highly visible from certain viewpoints" The modifier "may be" is a large copout. Industrial high visability is a certainty. The "rural nature" comment is an admission that the entire character, not just the visualization of the area will be forever changed to

industrialization. Once again the entire right and Eastern side of McCain Valley is tourist, environmentaly and recreationally oriented, not rural. Visual views, the feeling of solitude and quite enjoyment are vital to the tourist and recreational visitor and user. The Tule Wind Power industrialization would ruin these current major attributes. The Tule Wind Power project is extremely deleterious to our backcountry area and should not be allowed.

The following BLM publications describe the wilderness areas, their sole access via McCain Valley Road and their significant environmental assets:

SAWTOOTH MOUNTAINS WILDERNESS QUOTED FROM THE CURRENT BLM WEBSITE AND 1997 BLM DESERT DISTRICT MAP

"Area Description: Ridges and valleys alternate here, arising from 1,400 feet to 5,600 feet. The ridges extend from the Laguna Mountains into the desert, creating the alluvial valleys of Vallecito, Inner Pasture and Canebrake Canyon. Wildlife residents include the San Diego horned lizard, spotted bat and willow flycatcher. Historically, Peninsular bighorn sheep made their home and today transient sheep use the area. Prairie falcon, golden eagle and Coopers hawk span their wings above the desert floor. More than 200 species of plants are believed to grow within this wilderness, where vegetation transforms from a dense chaparral at the higher elevations along the Laguna Mountains to low desert creosote bush. Many of the plant species are under review for listing as threatened or endangered.

Getting there: Although State Route 2 winds along the northern side of the wilderness, there is no legal access due to private lands along the boundary. The only access is from the Pepperwood Height Trail at the end of the McCane Valley. To reach this trailhead exit interstate 8 at the Manzanita Boulevard exit, follow State Route 94 east to McCain Valley and follow this road 13 miles to Cottonwood Campground".

CARRIZO GORGE WILDERNESS QUOTED FROM THE CURRENT BLM WEBSITE AND BLM 1997 DESERT DISTRICT MAP

"Location: San Diego County; 60 miles east of San Diego, California (Note Boundary setbacks from roads or trails are 30 to 300 feet)
Area Description: The Carrizo Gorge Wilderness offers some of the most expansive vistas in the California Desert. Views

stretching 100 miles or more are common. The panorama includes the Salton Sea, Chocolate Mountains, Anza Borrego State Park and Mount Signal on the Mexican Border. This wilderness is the only ecological transition zone between the Colorado Desert and the peninsular mountain ranges represented in the National Wilderness Preserve System. Three peninsular bighorn sheep herds call the area home., and the San Diego Horned Toad, Swainson's hawk, golden eagle and other birds of prey have all been spotted here. California fan palms line the edges of dry washes and narrow canyons, creating desert oasis.

Getting There: Access this wilderness by taking the Boulevard/Manzanita exit from Interstate 8. Follow State Route 94 east to the McCain Valley Road. Driving north, the wilderness is located along the east side of McCain Valley Road".

The unique and beautiful assets of McCain Valley and its adjacent wilderness areas are also described in the following guide and recreational publications:

Afoot and Afield in San Diego County by Jerry Shad says:

"The area between County Highway S2 and the BLM'S McCain Valley Cooperative Management Area constitutes some of the most wild, beautiful and serene territory in San Diego County". Also: "Cottonwood Campground is a good place for car camping, and serves as a jumping off point for hikes into the wild areas lying North and East. Several interesting hikes may be taken between McCain Valley and the desert floor" etc.

Back Country Adventures, Southern California by Peter Massey and Jeanne Wilson says:

"Sacatone Overlook offers views into the Carrizo Gorge" Also: "The paved road turns to graded dirt as it enters the McCain Conservation Area. Along the way it passes two viewpoints over the Carrizo Gorge area and travels through a magnificent undulating landscape strewn with giant granite boulders" also "a second overlook into the Carrizo Gorge region encompasses the badlands as well as the valley area".

The Sierra Club's Wild Heritage Campaign publication on The Carrizo Gorge Wilderness says:

"Contains critical habitat for the endangered Peninsular bighorn sheep" also "The area provides outstanding habitat for bighorn sheep including potential lambing areas. Bighorn scat, tracks and beds have all been observed here. While the

habitat is good, the Carrizo Gorge band is one of the most precariously balanced of all Peninsular bighorn groups with just 19 ewes counted in 1998; everything possible must be done to protect these vanishing symbols of the desert."

A Sierra Club publication "Still Wild, Always Wild" by Suzan Zwinger on pages 16 and 17 says:

"It is early February and Carrizo Gorge Overlook is an ideal place for my exploration to begin. Below me, dropping three thousand feet down, the Ink-ko-pah, Carrizo, and Bow Willow Gorges look like arid crevices of rock boulders. ---- This overlook straddles the transition between the peninsular zone's moist mountain climate and the dramatic Sonoran Desert. I stand at the serrated-knife-edge of two ecosystems and their exceptionally rich variety of species.
Last night I slept half a mile back from this escarpment (McCain Valley's Cottonwood Campground) under lush old madronas, huge manzanitas with thick trunks, and deep green oak trees. ---- To the east-northeast, the whiter than white Salton Sea shimmers below sea level. Far to the southeast, Picacho Peak Wilderness drops down to the Colorado River ---- . To the southeast, the Mexican border's steep mountain terrain, the Jacumba Wilderness, sinks from high coastal mountains on the west to sea level in a matter of miles".

The Tule Wind Report presents wildlife risk as a necessary afterthought. They are willing to risk wildlife harm as secondary to the claimed economic and social benefits. The wildlife at risk is enumerated in the just quoted six publications. The extent of the risk is considerable because of the size of the project and its proximity to the wildlife itself. The experience at other Wind sites is revealing in this regard. BLM has recommended cutting the number of turbines at Tule in half because of the threat to golden eagles. Iberdrola has expressed its opposition to this reduction in spite of a dismal record at the Californian Altamont Pass Wind site that reports 1000 raptor kills a year. 100 of these fatalities are golden eagles. Lets not put the golden eagle, other raptor and the bat population of Eastern San Diego County in jeopardy with the proposed Tule Wind project (see included BLM wildlife reports in the 2 wilderness areas).

The prior BLM reports and the Sierra Club reports indicate an active but threatened Bighorn sheep population along the McCain escarpment. Why risk this vital population of Bighorns? On the other side of Anza Borrego State Park (about 20 miles away) at Coyote Creek, BLM and De Anza State Park wildlife people shut down travel on the Coyote Creek

road for 5 months each year during the Bighorn lambing season. The proposed heavy truck travel on McCain Road and the ongoing noise, wind disruption and vibration will cause disruption to the precarious Bighorn population especially during the vital lambing season and during periods of drought when Bighorns are forced to move over wider areas to find water.

The heavy industrialization of the McCain Valley area can only worsen the overall wildlife population.

Finally, the economic future of far Eastern San Diego County is heavily dependent on tourism and retiree residences. Both would be severely impacted by reduced real estate values and tourist visits caused by the actuality of wind energy, including Tule, and electrical line industrialization. Currently, landowners adjacent to present tribal turbines off Interstate 8 are experiencing a drastic inability to sell their real estate. The economy in East County is already suffering due to the recession. Wind energy industrialization will make it worse. The deleterious economic effects of the recession abound, for example, the only Jacumba clinic has just left Jacumba because of poor economic conditions.

EAST COUNTY SUBSTATION PROJECT ANALYSIS

Initially, in this analysis I wrote herein: "the substation location and size along with the many environmental harming feeder lines envisioned, should wait completion of the approval process for all of the various wind projects scoped. Too much is being rushed through all at once. The quality of life in the East County area is threatened by this rush to energy industrialization".

The substations should not be planned and sized until the various wind and solar projects are planned and approved. The EIR Report analyzed here, specifies three unapproved wind projects, the Tule, the Campo, the Jordan projects. These unapproved projects are tentatively intended to feed into the two substations. They are also scoped to be interconnected to each other. Then finally, lines from each of the various not yet sized and approved substations will be connected to the still in construction above ground Sunrise high power transmission line. The scope, the number of lines, the routes, the wattage and other key design elements are still in limbo, although many alternate routes have been mentioned in the document. Potentially, as many as seven new high voltage lines could be coming through the Jacumba-Boulevard area. This can result in the almost total

industrialization of this now beautiful area currently sprinkled with small ranches and residences.

What is the hurry? Each line and substation, if necessary to build at all, should be carefully planned, designed to minimize environmental impact, and then reviewed with the public. Not rushed through this hastened, sketchy and not yet completely defined process. Chaos and helter skelter electrical line and substation development is about to be dumped on the Jacumba-Boulevard area. The residents and visitors have had some details presented to them and what they have heard and seen is already deleterious to their property values and to the enjoyment of their homes.

If this energy industrialization is finally defined, all approved, then lets put all of the interconnecting and feeder lines to the substations underground. The imposition of the recently approved and under construction above ground high voltage Sunrise transmission line is already too much for the same environment. The various public agencies, the utility company and the developers are treating scenic Eastern San Diego County as a can be sacrificed "Throw away" environment.

Many pages of the substation report address the fire, safety and security of the Jacumba Substation. They fail to consider the fire, safety and security risks of a substation adjacent to the Mexican Border. The site chosen for this fifty-acre development is within shooting distance of the border. There is the well-publicized current and past instability of the Mexican government. There is the real threat of the Mexican drug cartels with which the Border Patrol is coping on a daily basis. The substation would present an attractive target for those border elements with interests inimical to the United States.

There is, therefore, a real danger to the facility, the environment around it and our energy supply. Much of the energy supply is intended for our military in San Diego and to the many hospitals and other health facilities along the way. Everyday there are televised reports of border incursions by organized and unorganized groups. Cross border gunshots, tunnels, fire and catapulted objects have been recently observed and reported. Recently this year, just outside of Boulevard, a Tunisian Muslim agitator and advocate of Sharia law, who had been expelled from both France and Canada for crimes and terrorist advocacy was found in a car trunk by the Border Patrol while being smuggled from Mexico.

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The report fails to address this overall extreme risk at all. These vulnerable and energy vital substations, if necessary should not be located within twenty miles of the Mexican border.

Sincerely,

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