

## Comments and Responses

This chapter presents the responses to all comments received on the Draft EIR for the proposed project. They are organized into four categories: General Public Comments, Public Agency Comments, Utility Agency Comments, and Other Groups Comments. Within each group, the letters have been numbered sequentially in alphabetical order.

Comment letters are reproduced preceding the responses to each. Individual comments are annotated in the margins of the comment letters. Where comments have warranted revisions to the text of the Draft EIR, those revisions are shown in ~~strikeout~~/underline format in Chapter 3, *Revisions to the EIR*, with page numbers referencing the original text's location in the Draft EIR.

**Table 2-1. List of Commenters**

Letter	Name	Affiliation	Date Received
General Public Comments			
GP1	Adams, Dennis and Carol	Resident	1/24/2008
GP2	Alvina, Vernon	Resident	1/28/2008
GP3	Beaudet, Philip	Resident	1/24/2008
GP4	Burns, Larry	Resident	1/28/2008
GP5	Carlson, William H.	Resident	1/28/2008
GP6	Citizen, Concerned	Resident	1/23/2008
GP7	Evans, Michael	Resident	1/28/2008
GP8	Fidman, Erik	Resident	1/24/2008
GP9	Fitch, Stephen A.	Resident	1/22/2008
GP10	Fritz, Tom	Resident	12/27/2007
GP11	Funk, Stephen L.	Resident	1/18/2008
GP12	Giacomini, Pam	Resident	1/12/2008
GP13	Hogan, Marvin	Resident	1/25/2008
GP14	McDonald, Kathryn	Resident	1/28/2008
GP15	Morris, Richard B.	Resident	1/28/2008
GP16	Sardoc, Dee	Resident	1/27/2008
GP17	Schneider, Virginia	Resident	12/28/2007
GP18	Sleight, Roger	Resident	1/23/2008
GP19	Sullivan, Marta	Resident	1/7/2008
GP20	Torgrimson, Rocky	Resident	1/25/2008
GP21	Urlie, Andrew	Resident	1/28/2008
Public Agency Comments			
PA1	Stacy, Gary B.	California Department of Fish and Game, Northern Region	1/14/2008

Letter	Name	Affiliation	Date Received
PA2	Rowe, Benjamin C.	California Department of Forestry and Fire Protection	1/29/2008
PA3	Gonzalez, Marcelino	California Department of Transportation, District 2	1/7/2008
PA4	Diehl, Jim	Shasta County Fire Department	1/21/2008
Utility Agency Comments			
UT1	Uchida, Jensen	California Public Utilities Commission	1/28/2008
UT2	Momber, Michael J.	Pacific Gas and Electric Company	1/23/2008
UT3	Beck, James W.	Transmission Agency of Northern California	1/28/2008
Other Groups Comments			
OG1	Giacomini, Pam	Burney Chamber of Commerce	1/14/2007
OG2	Limon, Ramona	Pit River Tribe	1/28/2008
OG3	Teller, Sabrina	Remy, Thomas, Moose and Manley, LLP	1/28/2008
OG4	Hughes, Nicole S.	RES America Developments, Inc.	1/28/2008
OG5	Hughes, Nicole S.	RES America Developments, Inc.	1/28/2008
OG6	Young, David	WEST, Inc.	1/28/2008
OG-7	Oliver, William W.	Wintu Audubon Society	1/22/2008

# General Public Comments

**Letter GP1**

**From:** Dennis & Annie [mailto:denandannie@frontiernet.net]

**Sent:** Thursday, January 24, 2008 1:40 AM

**To:** Bill Walker

**Subject:** wind turbines

Hi

My wife and I are not in favor of the wind turbine project. We believe it will destroy the beauty of this area.

**GP1-1**

Dennis & Carolyn Adams

20486 Camas Rd, Burney, CA 96013

335 2242

## **Letter GP1 Dennis and Carol Adams**

### **Response to Comment GP1-1**

It is noted that the commenter opposes approval of the proposed project. This information will be provided to the Shasta County Planning Commission.

RECEIVED

JAN 28 2008

COUNTY OF SHASTA  
PERMIT CENTER

Letter GP2

VERNON ALVINA  
P.O. BOX 194  
ROUND MT., CA. 96084  
1/28/08

TO WHO IT MAY CONCERN,

I AM A MULTIPLE PROPERTY OWNER IN THE INTER MOUNTAIN AREA. I AM WRITING TO EXPRESS MY CONCERNS ABOUT THE HATCHET RIDGE WIND PROJECT.

AS I MENTIONED AT THE APRIL 25, 2007 MEETING IN BURNEY, THIS PROJECT APPEARS TO BE A DONE DEAL. PUBLIC MEETINGS AND ENVIRONMENTAL REPORTS WILL APPARENTLY HAVE NO EFFECT ON WHETHER OR NOT THE PROJECT WILL GO FORWARD. I REALIZE THE PROPERTY BEING DEVELOPED IS PRIVATE AND AS A LAND OWNER MYSELF CAN SYMPATHIZE WITH THE OWNERS DESIRE TO PROFIT FROM THEIR HOLDINGS.

THE PERMANENT NATURE OF THIS PROJECT PROMPTS ME TO QUESTION HOW IT CAN BENEFIT THE LOCAL COMMUNITY. IN TRADE FOR THE DISRUPTION OF THE NATURAL BEAUTY OF THE AREA, THE DAMAGE TO THE WILD LIFE AND OUTDOOR SPORTS THAT IT MAY CAUSE, WHAT CONCESSIONS COULD THE LOCAL COMMUNITY GET?

FURTHER TALKS SHOULD BE HELD TO SET ASIDE SOME OF THE PROFITS FROM THIS VENTURE TO RECTIFY ITS EFFECTS AND POSSIBLY ESTABLISH A FUND TO HELP LOCALS DEVELOP SIMILAR TECHNOLOGY.

VERNON ALVINA

GP2-1

GP2-2

GP2-3

## Letter GP2 Vernon Alvina

### Response to Comment GP2-1

It is noted that the commenter is a property owner in the area and has concerns about the proposed project. As stated in the introduction to the Draft EIR, the CEQA compliance process is only one step of the approval process for the project. Shasta County has not approved the proposed project, nor has it entered into any agreements related to the project with the project applicant. .

### Response to Comment GP2-2

The commenter inquires regarding the benefits of the project for the local community. While the applicant has indicated that local communities will benefit indirectly through increased renewable energy capacity in the local electric grid, CEQA does not require a detailed analysis of the socioeconomic effects (either positive or negative) on the local community, nor does it require an analysis of the potential “concessions” that may or may not be made on the part of the applicant (State CEQA Guidelines Section 15131).

The aesthetic and wildlife impacts of the projects are addressed in detail in the Draft EIR (Sections 3.1 and 3.4, respectively). The initial study analysis prepared for the proposed project concluded that there would be no impact on public recreational resources. As discussed in Section 3.9.2 of the Draft EIR, impacts on recreation resources would be less than significant.

### Response to Comment GP2-3

It is not within the purview of CEQA to analyze the distribution of profits from any particular proposed project. The comment is noted and will become part of the record presented to the Shasta County Board of Supervisors for consideration.

**Letter GP3**

**From:** Philip Beaudet [mailto:pbeaudet@mac.com]

**Sent:** Thursday, January 24, 2008 2:18 PM

**To:** Bill Walker

**Subject:** Hatchet Win Power Project

I will have a view of the project. It will not detract from my view. I am in full support of the project.

**GP3-1**

Philip Beaudet

37268 Vedder Road

Burney, CA 96013

530-335-3261

530-355-0589

<http://www.pbeaudet.us>

One cannot have one's photon and wave it too.

<http://www.lulu.com/pbeaudet>



## **Letter GP3 Philip Beaudet**

### **Response to Comment GP3-1**

It is noted that commenter supports approval of the proposed project.

Jan 28 08 04:21p

Larry Burns

530-336-6876

p.1

Letter GP4

**LARRY BURNS**  
 P.O. Box 95, McArthur, CA 96056 (530) 336-6876

**FAX TRANSMITTAL COVER SHEET**

Date: 28 JAN 2008  
 To: Shasta County Resource Management  
 Attn: Mr. Bill Walker  
 Fax No.: 530-245-6468  
 Subject: Hatchet Ridge Wind Project DEIR  
 Pages: 1 (including this cover sheet)

My comments on the DEIR for the above project are as follows. I support the project, but the simulated views of the completed project, figs. 3.1-12 and 3.1-13, leave no doubt the project will be a significant eyesore for everyone in visual range. The DEIR does not mention that the wind turbines will probably be more visible from Burney in the morning while directly illuminated by the sun and in the evening when they will be silhouetted against the sunset. The DEIR states that the adverse visual impact cannot be avoided or mitigated. This is only partly true. GP4-1

The wind turbines could be limited in their size and height as well as the overall number. The turbines could also be placed on the westward slope below the ridge line so that they are less visible above the ridge horizon from both directions. The lower placement of the turbines may help mitigate the expected bird mortality, particularly for the sandhill cranes and possibly for the eagles. The cranes and eagles are migrating through the area and probably do not fly as low to the ground before reaching the ridge top as they do while crossing the highest point of the ridge. A lower placement on the slope would also benefit pilots' safety. GP4-2

I know that the lower placement of the turbines would put them in a less efficient, less profitable position. I also know that it is windy almost all the way to Montgomery Creek. Typical wind farms coat the hills on both sides of the ridge top, examples are the Tejon Pass and Livermore wind farms. This means that a commercially feasible wind project could be constructed in the areas that are less efficient energy-wise but more acceptable visually and possibly environmentally. The only reason I can think of that the adverse visual impact could not be mitigated as described is Hatchet Ridge Wind LLC's unwillingness to accept a less than maximum profit. GP4-3

Please call me at the telephone number above if you have any questions.

Thank you for your time and attention - *Larry Burns* Larry Burns

## Letter GP4 Larry Burns

### Response to Comment GP4-1

Discussion has been added to the analysis in Section 3.1.2 to address morning illumination and silhouetting against the sunset.

### Response to Comment GP4-2

The commenter proposes a variety of turbine layout options with the goal of reducing the visual impact of the project. During the Draft EIR review period, the County requested information from the applicant regarding turbine placement and arrangement and the potential to reduce visual impacts. The applicant provided a response, dated February 11, 2008; this letter is reproduced in Appendix A. The applicant states the following siting constraints in its response: (1) existing wind resource and wind speed, (2) leased area boundaries, (3) setback from neighboring landowners and existing transmission lines, (4) microwave paths, and (5) turbine spacing requirements. The applicant explains in some detail that even slight modification of turbine locations could reduce the generating capacity of the turbines, thereby rendering the project economically infeasible. The applicant concludes that, “when combined, the constraints provide virtually no flexibility for moving upwind from their proposed locations.” Moving the towers away from the ridgeline would reduce the wind speed at the turbine locations (and therefore the wind power) to a level that would render the project nonviable. See Section 2.4 of the Draft EIR for a discussion of wind turbine siting considerations, and the *Zone of Visual Influence Assessment* at the end of Appendix A.

### Response to Comment GP4-3

Refer to the response to Comment GP4-2. It is noted that the impact on aesthetics and visual resources is considered significant and unavoidable. See Section 3.1.2 of the Draft EIR for a disclosure of this impact.

Letter GP5

RECEIVED  
JAN 28 2008  
COUNTY OF SHASTA  
PERMIT CENTER

Bill Walker, Senior Planner  
Shasta County Department of Resource Management  
Planning Division  
1855 Placer Street  
Redding, California 96001

Dear Mr. Walker:

**Re: Hatchet Ridge Wind Project EIR**

The EIR for the proposed Hatchet Ridge Wind Project describes a visual impact that is simply too intrusive for this rural location in Eastern Shasta County. If instead of a 420 foot tall wind turbine, a 40 story office building had been proposed to the same location, the public uproar would be deafening. That building would be accused of being out of place in that location and out of scale with its surroundings. So too is the wind project.

GP5-1

The EIR is also too nebulous regarding what will be built. Will the turbines be tall or shorter; 2.4 mw each or half that; 68 in number or more, located in this exact location or elsewhere on the ridge; and will the collector transmission line be above ground or below? The EIR is supposed to answer all these questions definitively, not leave them to the interpretation of the developer at some later date.

GP5-2


The environmental and energy benefits of wind projects have consistently been oversold, particularly in California. In actuality, the addition of more wind turbines in California actually displaces no new needed electrical generating capacity in California. The unreliability of wind energy forces other generation to still be built to displace it when the wind does not blow. The wind turbines will indeed displace the burning of fossil fuels when running, but that will be a small fraction of the time.

GP5-3

By contrast, the Burney Forest Power biomass power facility located directly east of Hatchet Ridge along Highway 299 is a much smaller facility in terms of megawatt output (31 vs 102 mw), but will produce an equal or larger amount of renewable energy on an annual basis. And, it does so without spreading its footprint over several miles of ridgeline visible for miles in every direction.

I have visited all the major wind generation areas in California, and find them to be uniformly over done, out of place and just plain ugly. But none (Altamont, Tehachapi or Palm Springs) are nearly as out of place relative to the setting as those proposed for Hatchet Ridge. None of the others are in an area so scenic as to be a tourist attraction just by driving through. The EIR does not come close to adequately addressing what a disruption these massive wind machines will be to an area as remote, scenic and undisturbed as Hatchet Ridge.

GP5-4

Sincerely,  
  
William H. Carlson  
13395 Tierra Heights Road  
Redding, CA 96003

## Letter GP5 William H. Carlson

### Response to Comment GP5-1

Comment noted. The analysis in the Section 3.1.2 of the Draft EIR determined that the proposed project's visual impacts on the existing visual character would be significant and unavoidable.

### Response to Comment GP5-2

As discussed in Chapter 2, *Project Description*, of the Draft EIR, a range of three turbine sizes and locations were considered to allow for fluctuating turbine market availability. However, because of the reasonable certainty of the project applicant that the configuration selected would comprise forty-four 2.3-MW turbines, and because the relative severity of impacts associated with each of the three options would be similar (i.e., none of the three options would entail a change in the significance finding for any resource area), the analysis focused on the 44-turbine configuration. The County maintains that the Draft EIR adequately analyzes the potential environmental impacts of the proposed project regardless of the turbine model ultimately selected, so long as the final project is within the range of options summarized in the project description.

### Response to Comment GP5-3

The commenter's opinion about electrical energy generation in California is noted. It should be noted, however, that energy reliability in California requires a mix of baseload and peaking capacity sources, and wind energy is a growing and important resource within that portfolio. As duly noted by the commenter, wind energy facilities require a larger overall footprint than do biomass facilities; however, wind facilities generate no pollutant emissions, whereas biomass facilities do.

### Response to Comment GP5-4

Comment noted. Section 3.1 of the Draft EIR addresses the existing scenic resources of the area, including tourist attractions such as local parks and the natural environment. The analysis evaluates impacts associated with views from these areas, as well as from local roadways including the Volcanic Legacy Scenic Byway. While Hatchet Mountain and the areas surrounding it are in a scenic and mountainous rural area, the ridge and surrounding areas do exhibit human-made disruptions of the viewshed such as the clearcut utility corridor that traverses the ridge, timber harvest clearcuts, cell phone towers, and wooden utility poles alongside and traversing roadways. The analysis adequately discloses all these factors in an unbiased manner and with an appropriate level of detail and addresses the significant and unavoidable impacts on the existing visual character of the area that would result from implementation of the proposed project.

Letter GP6

DEPARTMENT OF  
RESOURCE MANAGEMENT  
RECEIVED

JAN 23 2008

PLANNING/BUILDING  
DIVISION

The rest of California is being paved over - the Central Valley, the Bay Area and all of Southern California.

We need electricity - but not at the expense of obliterating a very scenic and irreplaceable area.

GP6-1

The windmill project developers have no concern about the negative effects this project will have for those of us who live in the inter-mountain area. Their only concern is profits. If they want to promote this kind of endeavor let them do it in Texas - that is where they are from. I'll bet these Texans don't have these kinds of windmills in their backyards!

GP6-2

The jobs created during the construction process will last only about a year. At the completion of the project there will be about half a dozen permanent jobs. These windmills are not temporary - they are permanent. The long term effect will be a colossal eye sore on the ridge of Hatchett Mountain.

GP6-3

These windmills are gargantuan in size - about 250 feet high plus the propeller blades! Just imagine 49 twenty-five story buildings on the ridge of Hatchett Mountain. It is ironic that there is a scenic turnout on Hatchett Mountain as you descend toward Burney.

GP6-4

The Fountain Fire of 1992 incinerated over 60,000 acres in the same general area. It has taken years and enormous effort by the Forestry Service and others to restore these mountain sides. It will take many more years for this area to look as it did before the fire. The windmill project will be a major intrusion into this restoration work.

This project had very little publicity. In fact, if you do not subscribe to the local newspaper there is little

GP6-5

chance you would have ever heard about it. The windmill project was announced on Dec. 13, right before the holidays hardly a time when people would be reading a lengthy Environmental Impact Report. This tactic seems to have worked very well for these Texas developers since there have been only 5 letters to the county regarding this project. It also seems calculating and sneaky.

The people of the Pit River Tribe consider the Hatchett Mountain area to have special sacred and traditional meaning. How can their concerns be downplayed or ignored? Their ancestors have lived in this area for thousands of years.

Unfortunately, they have the same problem as the other ordinary people living in Burney. They do not have the money, organization and political connections to make any difference in projects such as these.

The Altamont Pass near Tracy is certainly not as scenically blessed as Hatchett Mountain and the Burney Basin. There are hundreds of windmills scattered on the barren, open hills at Altamont. Those bleak mountains are certainly not enhanced by those windmills. Those who will eventually make the decision to go ahead or reject this project should go to Altamont to see for themselves the impact of a windmill project.

Being only an ordinary resident in Burney and not convinced that my voice will be heard by anyone making the decisions I feel that we might as well get used to seeing these un-natural and out-of-place structures every time we look west from Main Street toward Hatchett Mountain. Sincerely,

GP6-5  
cont.

GP6-6

GP6-7

## Letter GP6 Concerned Citizen

### Response to Comment GP6-1

It is noted that the commenter opposes approval of the proposed project. No CEQA-related issues are raised.

### Response to Comment GP6-2

It is noted that the commenter opposes approval of the proposed project. No CEQA-related issues are raised.

### Response to Comment GP6-3

It is noted that the commenter opposes approval of the proposed project. Aesthetic impacts are disclosed in Section 3.1 of the Draft EIR.

### Response to Comment GP6-4

It is noted that the commenter opposes approval of the proposed project. Aesthetic impacts are disclosed in Section 3.1 of the Draft EIR. The analysis in Section 3.2.2 of the Draft EIR concluded that the proposed project would have a less-than-significant impact on forest resources and forest restoration work.

### Response to Comment GP6-5

It is noted that the commenter opposes approval of the proposed project. A list of all the comment letters received on the project is included in Table 2-1 of the Final EIR. All CEQA-mandated notices, timeframes, and provisions for public involvement have been rigorously observed. Impacts on cultural resources are addressed in Section 3.5 of the Draft EIR.

### Response to Comment GP6-6

It is noted that the commenter opposes approval of the proposed project.

### Response to Comment GP6-7

It is noted that the commenter opposes approval of the proposed project. All comments received on the Draft EIR will be provided to the County decision makers.



**Letter GP7**

**From:** Michael Evans [mailto:mevans@cwo.com]

**Sent:** Monday, January 28, 2008 3:55 PM

**To:** Bill WalkerCc: Rick Evans

**Subject:** Hatchet Wind Project

Dear Mr. Walker

My name is Michael Evans and together with my brother Richard Evans am joint owner of a ten acre parcel located on SH299 about 3 miles west of the Hatchet Mountain summit. The parcel number is 030-080-004-000. This parcel is something of a family heirloom as it was acquired by my great grandfather Thomas Hays early in the last century and has passed down through generations to my brother and I. My great grandfather was a school teacher in Fall River Mills and he spent his summers on the land on Hatchet Mountain. In the course of time he built 3 cabins on the property which were all lost during the Fountain Fire. My grandfather, Harold Hays leased Hatchet and Bunchgrass Mountains and ran sheep herds there during the 1920's and 10930's. At the time of the fire, the property was owned by my parents, Robert and Betty Hays Evans. Afterward, they deeded the land to my brother and I.

**GP7-1**

Since then, we have cleared the fire debris, and used the timber harvested from the property to build a new cabin. We've recently begun re-forestation activities and we have invested a lot of money to rehab the land and the environment there. It is with dismay that I have belatedly become aware of the magnitude of the Hatchet Wind Project. I have just reviewed the EIR and I must register my alarm. Despite assertions in the EIR, 60 towers over 400ft tall is going to have a horrific impact on the mountain, and it's denizes, human and animal. The visual impart alone will be devastating forever ruining the ridge's appearance that is only now beginning to recover from the fire. The noise alone could easily render my home uninhabitable and the effect on wildlife in the area, also just recovering from the fire, will be terrible. Outside of another fire, I can't imagine a more despoiling event than the approval of this project.

**GP7-2**

**GP7-3**

Speaking quite personally and selfishly, I am fearful that this project if approved will render my property valueless. Over the years we've resisted efforts by various companies to acquire our land including The Red River Company, Ralph L. Smith, Kimberley Clark and Roseberg. In the summer after the fire, Roseberg offered us \$2000/acre for the property. In the last 15 yrs or so, we've invested over \$300,000 to rebuild and rehabilitate. I realize that as possibly the only private landowner between Moose Camp and the project, my protest doesn't count for much but as someone who treasures the land and pays homage to it's history I must argue that Hatchet Mountain Wind Project not be approved.

**GP7-4**

## Letter GP7 Michael Evans

### Response to Comment GP7-1

It is noted that the commenter is a property owner with family roots in the vicinity of the proposed project.

### Response to Comment GP7-2

Comment noted. The analysis in Section 3.1.2 of the Draft EIR disclosed that the proposed project's visual impacts on the existing visual character would be significant and unavoidable.

### Response to Comment GP7-3

The effects on wildlife and noise impacts associated with the proposed project are disclosed in Sections 3.4 .2 and 3.10.2 of the Draft EIR, respectively.

### Response to Comment GP7-4

CEQA does not require a detailed analysis of the socioeconomic impacts of a proposed project, nor does it require an analysis of a project's impacts on property values (State CEQA Guidelines Section 15131). All comments will, however, be provided to the County decision makers.

Letter GP8

**Erik Fidman**  
PO Box 1166  
Mount Shasta, CA 96067  
(530) 261-2120  
[Fidman@gmail.com](mailto:Fidman@gmail.com)

*Attn:* Bill Walker - [bwalker@co.shasta.ca.us](mailto:bwalker@co.shasta.ca.us).

Dear Mr. Walker:

As a concerned electricity-consuming citizen of northern California, I strongly urge the rational use of the, clean, and much needed wind-generated power that the Hatchet Ridge Wind Farm would provide. We are living in an era of significant confusion in energy matters, however I believe that a little straight thinking is in order.

GP8-1

The arguments against the use of the windmill farm are purely opinion and not back by conclusive evidence:

□ Eagles - There is little evidence to suggest that birds, especially endangered eagles are unconscious enough to commit suicide by flying into the spinning wheels of the new generation of highly visible, larger and slower spinning windmills. The EIR biologist's estimate of one Eagle killed every two to three years is only an educated guess. It is highly probable that no Eagles will ever be killed by these slower wheels. Eagles are renowned for their vision... The term "eagle eye" referring to the eagles profound eyesight. The eagle argument is simply the weakest argument; hypothetical and unproven in any scientific manner designed to appeal to one's emotions. This base argument is designed to label and control those who oppose. Society only advances from the exercise of clear and unbiased decision-making.

GP8-2

□ Visual "eye sore" objection - This objection is purely stated opinion designed to manipulate a negative decision on the advancement of potentially significant move to develop energy independence. I wonder if any financially interested parties are involved manipulating outcomes by supporting surrogate interests? My opinion is that the windmills are exciting. They are "dancing with the wind", visually displaying its power. I actually look forward to seeing the windmills as I enter into the Palm Springs area. The investment in those windmills has been providing needed power for many years!

GP8-3

□ Sacred sites - The word sacred is relative. All things can be considered sacred to someone. There is a method of determining which is opinion of values should be applied. Land ownership. There is a Constitutional-based right that land ownership is rationally in favor of reasonable use by the landowner. Governmental usurpation of this right leads down a dangerous road of unreasonable abuse of power. This "sacred" document by default should therefore be given the upper hand when ever reasonably possible!

GP8-4

The arguments for the Windmills, I hardly need to make:

- Energy independence
- Needed use of clean energy resources.
- Developing cost effective means of providing electricity to a growing and productive population.

Additionally it should be noted that the development and use of all other viable energy resources (hydro-electrical, coal, nuclear) all contain significant negative impact "costs". It seems to me that the development and use of Windmill energy is by far one of the easiest and best choices we can make as a society.

Please consider my arguments in favor of developing wind energy via the Hatchet Ridge Wind Farm. I greatly appreciate your time and consideration in this matter and I urge your wisest societal decision.

Thank You,

Erik Fidman

GP8-5

## **Letter GP8 Erik Fidman**

### **Response to Comment GP8-1**

It is noted that the commenter supports rational use of the energy the project would provide, if approved.

### **Response to Comment GP8-2**

Impacts on biological resources are disclosed in Section 3.4 of the Draft EIR.

### **Response to Comment GP8-3**

Impacts on aesthetic resources are disclosed in Section 3.1 of the Draft EIR.

### **Response to Comment GP8-4**

Impacts on cultural resources are disclosed in Section 3.5 of the Draft EIR.

### **Response to Comment GP8-5**

The project objectives are discussed in Chapter 2 of the Draft EIR. All comments received on the Draft EIR will be provided to the County decision makers.

Letter GP9

1-22-08

DEPARTMENT OF  
RESOURCE MANAGEMENT  
RECEIVED

JAN 23 2008

PLANNING/BUILDING  
DIVISIONS

Shasta County Department of Resources Management  
Planning Division  
1855 Placer St. Suite 103  
Redding California, 96001

Attention: Bill Walker

Dear Bill:

As the former District Ranger and Forest Supervisor responsible for the area adjacent to the area of the Hatchet Ridge Wind Project I am very familiar with the area and potential impacts of this project.

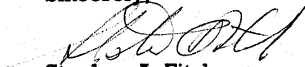
I strongly urge you to deny this project and similar projects because the towers, the revolving blades and attendant powerlines will degrade the scenic qualities of one of the outstanding travel corridors in Shasta County. | GP9-1

Preserving the scenic qualities of Shasta County is a cornerstone to preserving the most important and enduring economic base that the county has--outdoor recreation. | GP9-2

Further, while the National Forest and National Parks in the county have work hard to provide outstanding recreation opportunities, they must have the cooperation of their partner, Shasta County, in protecting the views to and from the Forest. The Bunchgrass Mtn./Hatchet ridge is such an area with hundreds of thousands of visitors to the county passing by anticipating a quality experience in adjacent forests, state, and federal parks. | GP9-3

Thank you for your consideration in this matter.

Sincerely,



Stephen A. Fitch  
19012 Shoreline Dr.  
Cottonwood, CA 96022  
Phone-530-347-0071

## Letter GP9 Stephen A. Fitch

### Response to Comment GP9-1

Comment noted. The analysis in Section 3.1.2 of the Draft EIR disclosed that the proposed project's visual impacts on the existing visual character would be significant and unavoidable. Impacts related to scenic travel corridors are also discussed in Sections 3.1.1 and 3.1.2.

### Response to Comment GP9-2

The visual and aesthetic impacts associated with the proposed project are addressed in Section 3.1 of the Draft EIR. CEQA does not specifically require addressing the economic impacts of a proposed project (State CEQA Guidelines Section 15131). Impacts related to recreation are discussed in Section 3.9.2.

### Response to Comment GP9-3

Comment noted. Please refer to the response to Comment GP9-2.

Letter GP10  
DEPARTMENT OF  
RESOURCE MANAGEMENT  
RECEIVED

December 27, 2007

DEC 31 2007

Bill Walker  
Shasta Co Dept of Resource Management

PLANNING/BUILDING  
DIVISIONS

Re: Hatchet Ridge turbines

Day after day we see and read articles in the media about global warming, about "going green" and about sacrifices that we should all make. I agree, and I think that most Americans do also. Most of us are willing to do our part. Of course there are always those that are not.

In the article, an advocate for the Pit River Tribe describes the turbines as "ugly". Well, if as the saying goes, beauty is in the eye of the beholder, then it's probably fair to say that ugliness is too. And, to go one step further, all too often this perception is linked to some personal or group agenda or financial bottom line. My personal "perception" is that casinos are ugly. They certainly have an ugly effect on the community. (See Searchlight article on Dec 26th, pg B2) Yet they continue to build them. Maybe the turbines would get a lot prettier if they were tied to some financial gain for the Pit River Tribe.

GP10-1

Certainly the visual effect that the turbines have would be minimal. Contrast that with the visual effect of a coal or oil fired generator which spues thousands of pounds of pollutants into the air and it's a no-brainer. Of course, I suppose it depends on whose backyard these facilities are in, but electrical power has to come from somewhere. Once again, sacrifices have to be made.

Tom Fritz  
Anderson



Tom Fritz  
3401 Riverside Dr.  
Anderson, CA 96007-3823



## **Letter GP10 Tom Fritz**

### **Response to Comment GP10-1**

It is noted that commenter supports approval of the proposed project. Aesthetics and visual resources are addressed in Section 3.1 of the Draft EIR; cultural resources are addressed in Section 3.5.

**Bill Walker**

**From:** Steve Funk [funk@snowcrest.net]  
**Sent:** Friday, January 18, 2008 4:53 PM  
**To:** Bill Walker  
**Subject:** Hatchet Ridge Wind Farm

PO Box 1268  
Mt. Shasta, Ca. 96067  
530 926-3776

Dear Mr. Walker,  
I would like to offer comments on the Hatchet Ridge Wind Farm EIR. I am a northern California resident and a consumer of electricity.

The EIR does not adequately explain the critical need for this project (and many others like it). This country faces a coming energy crisis. Coal, which supplies 50% of our electricity nationwide, is in disfavor because it is the worst fuel for potentially creating climate change. If a capture and sequester system can be initiated, it would reduce the energy available from coal by at least 20%. The supply of natural gas, which supplies 17% of our electricity nationwide likely to begin an inevitable decline very shortly. See this report: <http://www.theoil drum.com/story/2006/11/27/61031/618>. Nuclear power supplies 20% of our electricity, but our nuclear plants are mostly near the end of their projected life. Nobody seems to want a nuclear plant anywhere near them, and many of these plants may not be rebuilt. Hydroelectric generation supplies 8% of our electricity, but the supply of hydroelectric power is likely to decrease due to increased concern for anadromous fish, and due to irregular flows caused by climate change. The worldwide supply of oil is likely to peak and then decline within 10 years. [http://www.peak-oil-crisis.com/Hirsch\\_PeakOilReportFeb2005.pdf](http://www.peak-oil-crisis.com/Hirsch_PeakOilReportFeb2005.pdf) Although oil only produces 3% of our electricity, a reduced supply of oil will create an additional demand for electricity to charge electric vehicles, replacing liquid fuels.

GP11-1

The need for electrical generating capacity is critical. No source of electricity is completely free of impacts. This project does have adverse impacts, but the critical need for adequate supply of electricity should dictate that it be built.

Sacred sites:

The United States constitution, in the first amendment, guarantees freedom of religion. This means not only that citizens are free to practice their religious beliefs, but that nobody else can impose their religion on you. The members of the Pit River tribe are trying to impose their religion on everyone else, by attempting to restrict the use of land which they do not own, and which is not public land, because of their religious beliefs. It would be a violation of the first amendment rights of the land owners to deny this project just because others have habitually trespassed on the land and used it for religious purposes.

GP11-2

01/22/2008

Visual impacts:

I don't mind looking at windmills. They are very graceful structures. This is not a wilderness area. When I see a windmill, it reminds me of this poem:

<http://www.redhousebooks.com/galleries/freePoems/allWatchedOver.htm>

GP11-3

Bird Kills:

The potential to kill eagles is an unfortunate adverse impact. I commend the EIR authors for making their honest best estimate instead of trying to gloss over this issue. As I said above, I believe that the critical need for this project is more important than the small number of eagles that might be killed.

The EIR lists two possible sizes of tower. To mitigate the impact on eagles only the largest size should be used. The largest size will have blades rotating a little slower, so that eagles are more likely to see it, and less likely to get caught if they do try to fly through it. Another possible mitigation would be to give the remains of any eagles to local native Americans for ceremonial use.

GP11-4

Hydroelectric Impacts:

The EIR does not address the potential impact of the project on hydroelectric operations in the Pit River. In order to provide a steady flow of power, it is likely that the hydroelectric generators will hold back more water when the wind generators are operating at capacity, and release water more quickly when the wind is not blowing. This could have both favorable and unfavorable impacts. It probably is not a project stopper, but needs to be analyzed.

GP11-5

Sincerely,  
*Stephen L. Funk*

01/22/2008

## Letter GP11 Stephen L. Funk

### Response to Comment GP11-1

The County appreciates the additional information regarding fuel supply provided by the commenter. It will be duly noted in the administrative record for this project.

### Response to Comment GP11-2

Impacts on cultural resources are addressed in Section 3.5 of the Draft EIR.

### Response to Comment GP11-3

Impacts on aesthetics and visual resources are addressed in Section 3.1 of the Draft EIR.

### Response to Comment GP11-4

Most studies conducted to date have not found a relationship between turbine height and bird mortality or between rotor diameter and bird fatality (Barclay et al. 2007). The presumed reduction in bird mortality resulting from larger turbines is associated with the idea that one would need fewer turbines if they are larger, but that would not apply to this project because the number of turbines is fixed. Although there are legal avenues to distribute eagle feathers to Native Americans, there is no nexus to require such distribution as mitigation for eagle mortality.

### Response to Comment GP11-5

The Draft EIR does not address the potential impact of the project on hydroelectric operations in the Pit River because it is highly unlikely that the proposed project would have any effect on PG&E's hydroelectric facilities in the area. Hydroelectric projects are regulated by the Federal Energy Regulatory Commission (FERC), and operational changes require FERC approval as well as compliance with the National Environmental Policy Act (NEPA). Issues such as potential impacts on fish, wildlife, recreation and other environmental resources would be studied in great detail prior to approval of any operational changes to the Pit River hydroelectric facilities. At this point, such changes are not reasonably foreseeable.

Letter GP12

January 12, 2008

Shasta County Department of Resource Management  
Planning Division  
Attn: Mr. Bill Walker  
1855 Placer Street, #103  
Redding, CA 96001

DEPARTMENT OF  
RESOURCE MANAGEMENT  
RECEIVED

JAN 15 2008

PLANNING/BUILDING  
DIVISIONS

Dear Mr. Walker:

I am writing to express my support for the Hatchet Ridge Wind Project. Key Points:

--Project will exist on private lands, so access issues raised in the DEIR really are not significant, access will not change due to this project. | GP12-1

--While any loss of Bald Eagles and other avians is sad, the DEIR mentions a "possibility" of one Bald Eagle every two years. It's possible there will be no loss as well. Further, with the operation of only 44 turbines across a six and one-half mile area the foot print is small enough that adequate habitat remains so the avians may simply avoid the turbines altogether. | GP12-2

--The largest impact that can not be mitigated is the viewshed impact to the community of Burney. While that is significant, by limiting the project to 44 turbines and laying them out in the semi-linear fashion along the ridgeline it appears that only 14 or so will be highly visible. I believe that with this appropriate sizing of the project the community will come to accept this addition to their viewshed. | GP12-3

Not addressed in the DEIR are the economic issues which are significant. There are two points that must be recognized.

--Tax revenues from the operations phase of the project will be over one million dollars to Shasta County alone. This increased influx into the county's general fund is necessary and can greatly help to support our local growing needs for infrastructure. A portion of those funds should be shared with the greater community of Burney for our fire departments, hospitals, schools and other local districts. | GP12-4

--Finally, the greater view that is key in my mind is the ability to generate more power within this country to support our needs and reduce our reliance upon foreign sources of power. This clean and relatively light environmental impact project is a step in the right direction. | GP12-5

Sincerely,

Pam Giacomini  
41363 Opdyke Lane  
Hat Creek, CA 96040

## Letter GP12 Pam Giacomini

### Response to Comment GP12-1

As disclosed in Section 3.9.2 of the Draft EIR, issues related to access of the private land are considered less than significant.

### Response to Comment GP12-2

Impacts on biological resources are addressed in Section 3.4 of the Draft EIR.

### Response to Comment GP12-3

Impacts on aesthetics and visual resources are addressed in Section 3.1 of the Draft EIR.

### Response to Comment GP12-4

Comment noted. Along with the environmental impacts considered in the Draft EIR under CEQA, the economic consequences should be considered by the County as part of its decision-making process. CEQA does not specifically require addressing the economic impacts of a proposed project (State CEQA Guidelines Section 15131).

### Response to Comment GP12-5

It is noted that the commenter supports approval of the proposed project.

**Letter GP13**

**From:** Marvan Hogan [mailto:marvanhogan@yahoo.com]

**Sent:** Friday, January 25, 2008 7:53 PM

**To:** Bill Walker

**Subject:** Burney wind project is poison in present location

I just hope the people in charge of making decisions for our county's future know that a good idea in a bad location is a bad idea.

Mutilating the mountain charm of this sweetly blossoming art and nature-lovers community with an industrial monstrosity replacing this darling little town's mountainscape would be an amateur move, a backwoods concession to unconcerned, hustling hucksters and would be forever condemned by the locals and beyond.

Getting the developers to bring some benefit to our county's tax revenues and make a marginal contribution to green energy, while abstaining from brutal, unsightly pollution of our county's eastern hub of charm and its irreplaceable resource for tourism and monied retiree investment, would be best.

Turning them away and awaiting other developers who really care for the places they seek to resculpt forever would be the next best option.

I moved my home and law practice here for the tree and mountain views. I take great pains to travel to my home here and spend my money in this county's most wild but comfortable resort community for those rare features, located in a full-service township that still exudes simplicities of a century ago. If you take them away, I and others will no longer be able to fulfill those needs here.

Make them choose another site that respects the people and unique treasures of this county.

Marvan Hogan

(530) 242-8756

**GP13-1**

**GP13-2**

## Letter GP13 Marvin Hogan

### Response to Comment GP13-1

It is noted that the commenter opposes approval of the proposed project. Impacts on aesthetics and visual resources are disclosed in Section 3.1.2 of the Draft EIR. It is noted that the commenter prefers green energy development, but not at the expense of visual impacts in areas where tourism resources exist. Although CEQA does not require analysis of tax revenues in an EIR, the County decision makers will be provided with all comments received on the Draft EIR.

### Response to Comment GP13-2

It is noted that the commenter opposes approval of the proposed project. Impacts on aesthetics and visual resources are disclosed in Section 3.1.2 of the Draft EIR.



**Letter GP14**

January 28, 2008

Shasta County Department of Resource Management  
Planning Division  
1855 Placer Street, Suite 103  
Redding, California 96001  
Attn: Bill Walker, Senior Planner

Re: Comments on Hatchet Ridge Wind Project Draft EIR

Dear Mr. Walker:

Thank you for the opportunity to comment on the Draft Environmental Impact Report for the proposed Hatchet Ridge Wind Project.

I am concerned about the effects of the proposed project on avian species in general and on listed and protected avian species in particular. Please disclose in the Final Environmental Impact Report the authority under which Shasta County and/or the Project Proponent could “take” bald eagle, golden eagle, and sandhill crane, given that the California Department of Fish and Game cannot issue incidental take permits for these fully protected species (Draft EIR, p. 3.4-12).

Sincerely,

Kathryn McDonald  
824 Yuba Street  
Redding, California 96001

**GP14-1**

## **Letter GP14 Kathryn McDonald**

### **Response to Comment GP14-1**

Neither the County nor the project applicant will be authorized to “take” fully protected species. As discussed in Section 3.4 of the Draft EIR, impacts on listed species would be minimized to the greatest extent possible in accordance with U.S. Fish and Wildlife Service and California Department of Fish and Game guidelines.

JAN 23 4

COUNTY OF SHASTA  
PERMIT DIVISION

Letter GP15

REC'D  
COUNTY

JAN 2

REC

Richard J. Morris  
Shasta County Department of Resource Management  
Planning Division  
Attn: Mr. Bill Walker  
1855 Placer Street, #103

The following is submitted in response to the Draft Environmental Impact Report for the Hatchet Ridge Wind Project. Over the past 30 years I have served on number of tourism related committees and have donated hundreds of hours to improve our community. Projects I have initiated have included community murals, landscaping, school beautification, storefront redesign, and annual kite festivals. I feel qualified to speak to the aesthetics of our area.

First of all I would like to say that I support the basic concept of this project. My concern is for the positioning of the wind generators so that they have the maximum negative impact on the community of Burney. Photos in Figures 3.1-1-13, 3.1-3 and 3.1-4 begin to illustrate the dominance of Hatchet Mountain in the Burney "viewshed". There are very few locations along Main Street in Burney where this ridge isn't the dominant natural feature. A video might be more successful in establishing this point.

GP15-1

Photos 3.1-13 suggests the complete transformation of this ridge with the current positioning of the towers. As stated in the Impact AES-2, "the turbines become prominent visual features on the ridgeline and alter the visual character and quality for all viewer groups. In addition to the size, movement of the turbines would likely draw more . . . attention . . ." My concern with the "simulated view" is the unrealistic contrast of the white towers against an unnaturally light blue sky. A more typical deep blue Burney sky would provide a more realistic image of the visual impact of these towers.

GP15-2

Historically, the community of Burney has had an employment base largely dependent upon forestry related industries. With recent changes in these jobs, the community has had to become more reliant upon the money generated by the tourism industry. Upon questioning several business owners, it appears common for summer increases in revenue to be in the range of 20%-60%. With the establishment of Route 89 as a portion of the Volcanic Scenic Highway, it is anticipated that this source of income will only become greater. With the decline of the other employment options, this is a welcomed and critical change in the Burney economy.

GP15-3

With this increase in the reliance upon tourism it is important to focus on the interests of those who visit this area. In conversations with personnel at the Burney Chamber of Commerce and McArthur Burney Falls State Park, it becomes obvious that most tourists are from urban communities and are attracted by the scenic beauty of the area. More often than not they are young families who are trying to reconnect with the natural world. Hatchet Mountain has served as the "Gateway" to this world for many. The impact of the wind turbines is indeed "significant" as outlined in Impact AES-2 of the EIR report. My contention is that it is not "unavoidable".

I would like to propose that the wind turbines be moved west out of the view of those in the Burney Basin. This would drop them so that their visual impact on the Burney Basin would be minimized. There would also be less sound transference (3.10.2) and the towers would pose less threat to low flying aircraft. (Even though the EIR Report states that there is "no aviation facilities located within the project vicinity" this ridge is on a major route used by aircraft operated by PG&E, Redding medical facilities, law enforcement, and private individuals flying to the Fall River Airport.)

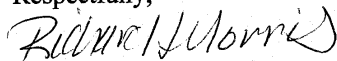
GP15-3

The movement of these towers will likely reduce the maximum power developed but will lessen negative impact on surrounding communities. We have in recent years seen the result of placing corporate profits above the welfare of the majority. This minor change in position of the towers will be a compromise that I believe will create a "Win-Win" situation for all.

In closing I would like to suggest a review of alternatives considered in Section 4.5.1 of the EIR Report. Wind generation offers us an opportunity to become "less reliant upon foreign oil" and have less negative impact on the natural world. The challenge is to use this technology in such a way that we don't destroy the very qualities of life we seek to preserve. The community of Burney deserves the chance to develop its tourism and enjoy the natural beauty which is its biggest asset.

GP15-4

Respectfully,



Richard J. Morris  
Burney, CA

## Letter GP15 Richard B. Morris

### Response to Comment GP15-1

Section 3.1 of the Draft EIR presents an assessment of the potential visual and aesthetic impacts of the proposed project. In the Draft EIR, the County has provided a reasonable estimation of the environmental impacts of the proposed project; this analysis includes a variety of still-shot photo simulations. While other methods of demonstrating these effects (e.g., video tape) are possible, the County believes that the visual simulations in the document present an accurate portrayal of the visual impacts and satisfy the requirements of CEQA. CEQA does not require a thoroughly exhaustive analysis; rather, the intent of CEQA is to provide enough information to allow the County decision makers to make an informed decision about the proposed project. Use of video simulations in the analysis would not change the conclusions presented in Section 3.1.2 of the Draft EIR.

### Response to Comment GP15-2

The commenter points out the potential difference between the visual simulations presented in the Draft EIR (using partially overcast sky) and a simulation of the proposed project using a clear blue sky. While a simulation using a blue sky might portray the project as being more prominent (white turbines against blue sky), the visual analysis included research regarding average annual meteorological conditions; this research indicated that a partially overcast sky is common in the project area. CEQA requires an analysis that reasonably predicts the potential environmental impacts of the proposed project. While many different viewpoints and sky conditions could be depicted, the simulation views presented in the Draft EIR are a suitable representation of the projects visual impacts.

### Response to Comment GP15-3

It is noted that tourism is an important component of the local economy; however, CEQA does not require analysis of economic effects in an EIR. Impacts on aesthetics and visual resources are addressed in Section 3.1 of the Draft EIR. Refer to the response to Comments GP4-2 and OG7-53. Also, see the *Zone of Visual Influence Assessment* at the end of Appendix A. Although the proposed project would not be within 5 miles of any general aviation airport, it could potentially interfere with air navigation, as disclosed on page 3.7-14 in Section 3.7, *Hazards and Hazardous Materials*, of the Draft EIR. Accordingly, the project would be required to comply with the requirements of the Caltrans Division of Aeronautics and the Federal Aviation Administration for air navigation safety. Refer to Mitigation Measures HAZ-4a and 4b on page 3.7-15 of the Draft EIR.

### Response to Comment GP15-4

A discussion of the alternatives analysis is provided in Section 4.5 of the Draft EIR. The County feels that this analysis is thorough, objective, and in keeping with CEQA requirements. See also the response to Comment GP4-2.

Letter GP16

-----Original Message-----  
From: Dee Sardoc [mailto:deesar@frontiernet.net]  
Sent: Sunday, January 27, 2008 2:28 PM  
To: Bill Walker  
Subject: Hatchet Ridge Wind project comment

Greetings,

I am writing about the proposed Hatchet Ridge Wind project. I wanted to point out a couple of things pertaining to the EIR, especially as it has to do with birds.

GP16-1

First of all, the EIR seemed fairly done, except that, in my humble opinion, a truly fair bird study would have been conducted over an entire year. I know that may seem unrealistic, but the movements of the birds can only be truly studied if done in all seasons. I have personally seen many more birds (including the threatened Sandhill Cranes) than the EIR indicates, flying through the project zone at various times.

There are 2 points that, to me, the EIR didn't really address. Firstly, Bald Eagles are very opportunistic feeders - they often scavenge dead carcasses of birds. I've personally seen Baldies feeding on dead Canada Geese in the wetland near my house - not geese they've killed, but that were already dead. This opportunistic, scavenging, feeding behavior of Bald Eagles is widely documented. I believe that the wind mills will kill all kinds of birds and I believe the Bald Eagles will be lured to the vicinity by the free food made available by the wind mills, and then will meet their demise. I realize this is conjecture, but I believe it to be well founded.

GP16-2

My other point is this - nothing was brought up in the EIR about the visibility of the wind mills to flying birds. I don't know how often you folks down in Redding drive over Hatchet Pass, but fog is a very big issue in that area. At times, the fog is so thick you can hardly see 20 feet in front of you. I know of many people who have started out to drive over Hatchet Pass, only to turn back, due to the poor visibility. The company proposing to build the windmills says that the slower rotation of the blades will cause the birds to be able to see them and avoid them. I believe that there will be a vast amount of time that the birds will not be able to see the spinning blades, due to the fog.

GP16-3

I also know of an official of the local Audubon society who has heard thousands of geese flying through that area while the fog was so thick you couldn't see the geese. This fellow knows his birds & he says that in Nov. 2003, he heard thousands of Snow Geese & Greater White Fronted Geese flying through the exact area the windmills are proposed for. He notes that if the windmills had been up & running, the thousands of birds would not have stood a chance, as they never would have seen the spinning blades until too late and they were barely skimming the ridge.  
(see  
<[http://groups.yahoo.com/group/shasta\\_birders/message/2951](http://groups.yahoo.com/group/shasta_birders/message/2951)>[http://groups.yahoo.com/group/shasta\\_birders/message/2951](http://groups.yahoo.com/group/shasta_birders/message/2951))

I noticed in the newspaper that you were quoted as saying you had only received positive comments on the windmill project. Personally, I have been

GP16-4

out of town for the greater part of January & have only recently returned, or I would have written this sooner. In addition, I know for a fact that the company, RES, has gone to great lengths to 'buy off' the community of Burney, so that they would be looked on favorably. The folks who have had their pet projects benefit from RES's 'generosity' (which I believe will quickly disappear if the windmills are allowed to be built) are the folks most in favor of the project.

**GP16-4  
cont.**

In conclusion, after reading the EIR, I cannot see how the county could possibly allow this project to continue - it says that the death of Bald Eagles and Sandhill Cranes will be unavoidable and the only mitigation would be to count the dead birds & try to get the company to shut down during peak migration periods. Well, if you look at the Altamont Pass project, you can see that they are having a great deal of difficulty in getting the company there to shut down. If these windmills are allowed to be built, the company will not want to shut down, as it will hurt their bottom line.

**GP16-5**

How can you possibly allow this project to go through, when the EIR plainly says that threatened species will die due to the project?

Thank you for the opportunity to address my concerns about the proposed project.  
Dee Sardoch  
Burney, CA

## Letter GP16 Dee Sardoc

### Response to Comment GP16-1

The bird monitoring study was conducted for an entire year, from November 15, 2005, to November 9, 2006. The study is included in Appendix C of the Draft EIR.

### Response to Comment GP16-2

Based on results of the bird monitoring study, the number of waterfowl mortalities is expected to be low. Waterfowl mortalities at other large wind farms are very low, even when large numbers of waterfowl are present, presumably because they do not typically fly within the height of the rotor-swept area. It is therefore unlikely that large numbers of waterfowl or other large species would be killed and subsequently serve as an attractant to scavenging bald eagles. Accumulations of bird mortalities significant enough to attract scavengers other than individual coyotes have not been observed at Altamont, the wind farm with the highest mortality rates.

### Response to Comment GP16-3

Thick fog is a factor that would increase the vulnerability of birds to rotating turbines on days when it occurs. However, as noted in the avian study, large waterfowl are generally known to fly above the rotor-swept height of the turbines, and the estimated exposure risk was low. The WEST report (Appendix C of the Draft EIR) also notes that mortalities at existing wind farms where waterfowl are present in large numbers are very low. Also, rotating turbine blades make noise and can be heard, even in thick fog. Finally, foggy days are usually not windy, and operations may not be feasible in such conditions.

### Response to Comment GP16-4

Comment noted. CEQA only requires that responses be provided to substantive comments on the content of the Draft EIR. Comments on the project applicant or the merits of the project itself are not within the purview of issues required for review by CEQA (CEQA Section 15088[c]).

### Response to Comment GP16-5

CEQA requires that the environmental impacts, along with feasible mitigation, be presented in an EIR. CEQA also allows for a lead agency to override impacts determined to be significant and unavoidable with a Statement of Overriding Considerations. In order to override any significant and unavoidable impacts associated with a proposed project (in this case, avian mortality), a finding indicating that the benefits of the project outweigh any unavoidable impacts would have to be issued. The County would be required to make such a finding should the proposed project be approved.



GP17-1

Letter GP17



Dec  
28  
2007

Dear

Bill Walker,  
I am all for the  
Turhines on Hatchet Ridge,  
I hope and pray this will  
be the beginning! That a  
day soon, the United States,  
will no longer import  
oil from any country.  
The Oil Spill's, Kill our  
beautiful Birds, and  
Spoil our beautiful beach's  
and shore's. Do your best.  
Thank you. God Bless you.

Virginia Schneider.

Support Our Troops ~ Remember Our Veterans

Who have lived in Burney since 1948.



Frank & Virginia Schneider  
36766 Highway 299 E Spc 50  
Burney CA 96013

REDDING, CA 960  
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DEPARTMENT OF  
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PLANNING/BUILDING  
DIVISIONS

Bill Walker  
Senior planner Shasta County  
Resource management  
Planning Division  
1855 Placer St.

96001+1789

Redding, CA 96001

## **Letter GP17 Virginia Schneider**

### **Response to Comment GP17-1**

It is noted that the commenter supports approval of the proposed project and alternatives to petroleum-based power generation.

**Letter GP18**

-----Original Message-----

From: Sleight [mailto:fluttrby@citlink.net]

Sent: Wednesday, January 23, 2008 7:04 PM

To: Bill Walker

Subject: Hatchet Ridge Windmill Project

Dear Mr.Walker,

I would like to express my feelings in favor of the windmill project.

It would make a positive impact on the economy of the area as well as showing

a willingness to promote clean energy which helps to protect the environment.

I do not believe that it would be an eyesore, nor do I believe it to be harmful to wildlife. I think, also, that the Indian tribes involved should give some consideration to joining the rest of us in constructive progress rather than maintaining their attitude of separateness and questionable reverence of the natural landscape. Thank you.

Roger Sleight

Resident of Hat Creek

**GP18-1**

## **Letter GP18 Roger Sleight**

### **Response to Comment GP18-1**

It is noted that the commenter supports approval of the proposed project. Impacts on aesthetics and visual resources are addressed in Section 3.1 of the Draft EIR; impacts on biological resources are addressed in Section 3.4.

01/22/2008 16:45 15303366202

J AND M SULLIVAN

PAGE 01

Letter GP19

P.O. Box 276  
McArthur, CA 96056

January 22, 2008

Shasta County Department of Resource Management  
Planning Division  
1855 Placer Street, Suite 103  
Redding, CA 96001

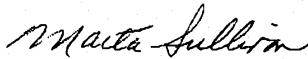
Attn: Bill Walker, Senior Planner  
Re: Comments on DEIR for the Proposed Hatchet Ridge Wind Project

Attached are my comments on your DEIR for the proposed Hatchet Ridge Wind Project.

GP19-1

I would appreciate receiving notification of further hearings on this project and would like to obtain the final EIR when it is available.

Sincerely,



Marta Sullivan

**COMMENTS ON THE DEIR FOR THE HATCHET RIDGE WIND PROJECT**

Biological Resources, Impact Bio-1,

The impact on Butte County morning glory is listed as "Less Than Significant" in this report, yet 6 turbines are scheduled to be built upon the main area where these rare plants are growing. Hatchet Ridge is listed as the third largest locality for Butte County morning glory in California and this location is therefore important to the continuation and success of this native plant.

Mitigation Measure BIO 2, page 3.4-16, paragraph 2, discusses "successful reestablishment" of these plants. It does not say how. Has this been achieved before? Plants become rare and/or endangered for a reason. How will invasive species be prevented from moving into its territory once the ground has been disturbed during the construction process. Prostate Knotweed is noted in one of the studies in the appendices as being present on the site. This plant is very invasive and the seeds are probably already present in the soil. A more appropriate mitigation should be to eliminate or move these 6 turbines.

GP19-2

Biological Resources, Impact Bio-2.

This impact relates to wetlands on the site. In the report, "Wetlands and Other Surface Waters Report" by Western EcoSystems Technology, Inc., it is stated that there are no wetlands on the site (page 3, paragraph 5). However, there are four "spring wetlands" and one ephemeral pool listed in the body of the DEIR, and on the maps included. The plants seen and listed are riparian in nature and indicative of wetlands present.

Mitigation BIO-3, page 3.4-17 contains a long list of mitigation measures to be taken to preserve these wetlands and make this impact "less than significant." This mitigation needs strengthening and should be written for the specific project site with these wetlands in mind. One of the mitigation measures proposed is to do the construction during the dry season. Our dry season is when the plants are flowering. The wet season is in the winter. If heavy equipment goes through these springs and damages their fragile ecology in the summer, the riparian plants may not come back the following year. The only preservation for these wetlands is to keep construction equipment off of them.

GP19-3

Elderberries are also listed throughout the report as being present on the site. On page 1 of 8, Table 3.4-3 (invertebrates), it is stated that there is no potential for the Valley Elderberry Longhorn Beetle on the site due to the lack of Elderberries. This is a curious statement in that Elderberries have been listed as being present on the site. The Valley Elderberry Longhorn Beetle is a protected invertebrate and its presence, or lack of, needs to be established.

GP19-4

Biological Resources, Impact Bio-12.

This impact deals with bats and their migrations. It was interesting to read about the Anabat II Bat detector technology used. However, this information did not reveal whether the bats would strike the turbines or not. Detectors were placed on the ground level and 50 m high. It was determined that bat migrations occur from August 5 to October 18. This may be weather dependent and migration probably goes into November. The study was unable to determine the exact species of many of the bats 'heard.' Until more study determines which bats use the area, this impact should not be considered "less than significant."

GP19-5

Ecological Resource, Impact Bio-13.

On page 3.14-24, it is stated that the majority of birds flew in migratory paths over the ridge and not along it. Thus, it is supposed, that they would not come into contact with the turbines located along the ridge. It is necessary for birds, and bats, to cross over the ridge to leave this intermountain area. I don't see the logic in the statement that they will not be affected by the turbines. More information is needed on the migration paths of birds, and bats, using this corridor for migrations purposes. Often the area has low clouds and visibility is greatly impaired. Also, many migrate at night and in darkness. There were no studies to determine these patterns in the report. This impact should not be considered "less than significant."

GP19-6

Finally, in the DEIR, there was a statement that 63% of the 1581 birds observed (1002 individuals) were seen at "rotor swept height." The teams which did the observing did not spend a long time at this and they still saw this very large number of birds which potentially had the probability of getting caught in the blades of the turbines. This is an extremely large impact and should be noted as this.

GP19-7

by Marta Sullivan  
January 7, 2008

## Letter GP19 Marta Sullivan

### Response to Comment GP19-1

This is a cover letter to the comments prepared by Marta Sullivan. As requested, Ms. Sullivan has been placed on the mailing list for this project and will receive notification of future public hearings on the project.

### Response to Comment GP19-2

Section 3.4.2 of the Draft EIR sets forth two options for reducing effects on Butte County morning-glory. Mitigation Measure BIO-1 calls for redesigning the turbine layout to avoid Butte County morning-glory habitat if feasible. If full avoidance is not possible, Mitigation Measure BIO-2 provides feasible measures to avoid and minimize effects on Butte County morning-glory. As discussed in the response to Comment OG6-8 and OG6-9, current knowledge indicates that Butte County morning-glory responds favorably to certain types of soil disturbance. Mitigation Measure BIO-2 calls for measures to control invasive nonnative plants.

### Response to Comment GP19-3

Mitigation Measure BIO-3 in Section 3.4.2 of the Draft EIR is a comprehensive array of measures to avoid and minimize effects on wetlands.

### Response to Comment GP19-4

Elderberries are present in the project area. However, the lowest elevation of the project area is approximately 4,300 feet, and the current range of valley elderberry longhorn beetle does not encompass areas above 3,000 feet.

### Response to Comment GP19-5

Comment noted. The number of bat detections in the project area was not unusually high. However, the text in Impact BIO-12 has been revised to reflect the fact that the project area does not contain habitat suitable to support large concentrations of bats (i.e., communal roosting or nursery sites). All bats with potential to occur in the project area are listed in the document; none of these are state- or federally listed species.

### Response to Comment GP19-6

Migrating birds often follow ridgelines which, under the right conditions, create updrafts that make long-distance flights easier. The fact that birds passed through the area perpendicular to the ridge indicates that the mountain is not used for this purpose and therefore that birds are not likely to be unduly concentrated along the ridgeline. Nowhere does the document suggest that birds will not come into contact with the turbines or will not be affected. Low clouds and visibility are typically associated with atmospheric inversions, during which there is little to no wind; consequently, the turbines are unlikely to be rotating during these conditions. Subsequent to publication of the Draft EIR, a nocturnal migration study using radar was conducted. The reports detailing the finding of this study and an evaluation of the study conducted on behalf of the Wintu Audubon Society are provided as Appendices B and C of the Final EIR. The results of the study indicate that the mean passage rates of “targets” (individual birds cannot be distinguished using radar) was approximately 1.1–23 nocturnal migrants/turbine/day within the area that would be occupied by turbines. Although very few similar studies have been conducted, and comparisons thus provide very little information, the passage rates were generally within the range of values reported at other study sites.

**Response to Comment GP19-7**

Although 1,581 birds were observed within the rotor-swept height, the number that would actually be affected is far less than this, as demonstrated in the West report (Appendix C-1 of the Draft EIR). To put it simply, the number of birds observed at rotor-swept height is not equivalent to the number of birds that would be struck by turbines for several reasons. For example; theoretical rotor-swept height over the project area constitutes a far larger area than actual rotor-swept area. Additionally, most individual birds are able to avoid turbines most of the time. Finally, only a fraction of the birds that fly through the actual rotor-swept area would suffer a bird strike.



**Letter GP20**

From: Rocky Torgrimson [mailto:rtorgrimson@dicalite-dicaperl.com]  
Sent: Friday, January 25, 2008 4:35 PM  
To: Bill Walker

Subject: Hatchet Ridge Draft EIR

Dear Mr. Walker:

I have reviewed the draft EIR for the Hatchet Ridge Wind project, and would like to offer these comments. This draft addressed most of the impacts. However, these following need further comments:

1. The mitigations for the visual impact of the project have not been fully addressed. Requiring the adjacent forest companies to allow the conifer trees achieve full maturity with heights exceeding 100 feet would help shield the visual impacts. I realize this will require a very long time, and the forest companies to stop clear cutting nearby.

**GP20-1**

2. The transportation issue of transporting the long turbine blades was not addressed. The stated blade lengths of 126 to 156 feet, coupled with the length of the truck equipment used to haul them, would exceed 180 feet, over 2.5 times of the legal length of regular trucks.

**GP20-2**

I don't think Hwy. 299 can accommodate loads of this length.

The benefits of this project far outweigh the negative impacts. With the population of California rapidly approaching 40 million, we need many more green energy producing projects like this one.

**GP20-3**

I am generally in favor of this project. I was born and raised in Burney, and have continued to work here my entire adult life.

Rocky Torgrimson

Ph. 530-335-5451x102  
rtorgrimson@dicalite-dicaperl.com

## Letter GP20 Rocky Torgrimson

### Response to Comment GP20-1

Comment noted. Timber management on properties adjacent to the project area was not considered in the Draft EIR; moreover, the County has no authority to regulate timber management on those properties. Finally, the towers would be so much taller than mature forest on the ridge that the visual consequences of retaining mature trees would not serve to reduce this impact to a less-than-significant level.

### Response to Comment GP20-2

The transportation and traffic impacts associated with the proposed project are addressed in Section 3.12 .2 of the Draft EIR. Transportation of equipment of unusual size or shape is regulated by Caltrans. Discussion on page 3.12-7 of the Draft EIR discloses that approximately 352 trucks would carry oversized loads. The size, weight, and configuration of these loads would be subject to Caltrans regulations. Safety hazards associated with the proposed project are addressed on page 3.12-10 (Impact TRA-2) of the Draft EIR.

### Response to Comment GP20-3

It is noted that the commenter supports approval of the proposed project.

**Letter GP21**

Mr. Walker,

I am expressing my concerns regarding the proposed wind-generation project on Hatchet Mountain. I am a private citizen; I live and work in Burney; and I am a member of the Burney Community.

I am opposed to this project because of the negative visual impact on the landscape and the destruction of native wildlife. I have attended all the public meetings on this project. The wind towers are huge and prominently visible from the entire town of Burney. The proposed site is in direct line with Main Street, and every citizen of this town will look at these monstrosities every time he or she drives down Main Street.

**GP21-1**

I work in the recreation industry. There are over 250,000 people who come to this area each year just to visit Burney Falls. There are probably an equal number of people who visit this area for the fishing, hiking, camping, and hunting that are not included in this visitation figure. The visitors who support this community with their recreation dollars come to this area because of the unobstructed natural beauty of the area.

**GP21-2**

I moved here to live and work in this area to see the beautiful forests and spectacular birds of prey – especially the bald eagles. This project threatens to mar the beauty of the forest and kill the birds of prey. This project would change the visual landscape and could inhibit recreational visitors from coming here to see the forests and the wildlife. This would result in a drop in visitation, less money spent in this area, and a hardship on the business community. The short-term construction gains are not worth the potential long-term losses.

**GP21-3**

I know these are “newer” style turbines and they kill fewer birds than the old turbines, but even one death of a bald eagle is unacceptable. This bird is our national symbol. Most people in our nation have never seen a bald eagle in the wild, and this project proposes to ruin one of the last places in California where viewing a bald eagle is still possible.

**GP21-4**

I am not opposed to wind-generated energy. When the technology is improved enough to not kill wildlife, these types of projects should be pursued. At that time they should be moved to areas that are not inhabited. This proposed project would be a visual eyesore to 5000 people that live in the Burney Basin Community (Burney and Johnson Park) and everyone who visits this area.

**GP21-5**

The proposed site for this project is not acceptable. Please address these concerns before continuing forward with this project.

**GP21-6**

Thank you for accepting public comments.

Andrew Urlie, Concerned Burney Community Member

## Letter GP21 Andrew Urlie

### Response to Comment GP21-1

Comment noted. The analysis in Section 3.1.2 of the Draft EIR concluded that the proposed project's visual impacts on the existing visual character would be significant and unavoidable.

### Response to Comment GP21-2

The commenter provides information regarding recreational activities and their contribution to local economies. Visual impacts of the proposed project are disclosed in Section 3.1.2 of the Draft EIR.

### Response to Comment GP21-3

Impacts on aesthetics and visual resources are disclosed in Section 3.1 of the Draft EIR. Impacts related to biological resources, including bald eagles, are disclosed in Section 3.4.2 of the Draft EIR.

### Response to Comment GP21-4

Impacts on biological resources are disclosed in Section 3.4 of the Draft EIR.

### Response to Comment GP21-5

Potential impacts on visual resources and wildlife are disclosed in Sections 3.4.2 and 3.1.2 of the Draft EIR, respectively.

### Response to Comment GP21-6

It is noted that commenter opposes approval of the proposed project. Evaluation of an alternative location for the project is presented in Section 4.5.1 of the Draft EIR.

# Public Agency Comments



State of California - The Resources Agency  
DEPARTMENT OF FISH AND GAME  
<http://www.dfg.ca.gov>

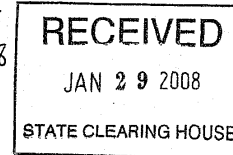
Northern Region  
601 Locust Street  
Redding, California 96001  
(530) 225-2300

Letter PA1  
ARNOLD SCHWARZENEGGER, Governor



January 25, 2008

Clear  
1-28-08  
late  
e



Mr. Bill Walker, Senior Planner  
Shasta County Department of Resource Management  
1855 Placer Street  
Redding, California 96001

Dear Mr. Walker:

**Hatchet Ridge Wind Project Draft Environmental Impact Report (DEIR)  
State Clearinghouse Number 2007042078**

The Department of Fish and Game (DFG) has reviewed Shasta County's (County) DEIR for the subject project. Hatchet Ridge Wind, LLC, proposes the construction of up to 68 wind turbines along a 6.5 mile corridor on Hatchet Ridge, extending north from a point approximately 0.5 mile north of State Route 299. The turbine towers will have a maximum height of 262-feet, and the turbine blades will be a maximum of 418-feet high to blade tip. The project will generate a maximum of 102 megawatts of electricity. A 230 kilo-volt overhead transmission line and tower system up to 5 miles in length will be constructed to connect the turbine system to the existing PG&E transmission system. Pursuant to Section 15082(b) of the California Environmental Quality Act (CEQA) Guidelines, the DFG offers the following comments on the DEIR in our roles both as a trustee agency and as a responsible agency.

PA1-1

**Operational Impacts on Avian Species**

As noted in its response to the Notice of Preparation (NOP), DFG believes that this project has the potential for substantial adverse operational impacts on birds, including species which are listed as endangered or threatened under the California Endangered Species Act (CESA), and species which are fully protected by law (Fish and Game Code (Code) Section 3511). The DEIR states the project has the potential for take of the following special status bird species due to wind turbine operations, resulting in potentially significant adverse impacts:

PA1-2

- Greater sandhill crane (*Grus canadensis tabida*) - State listed as threatened and fully protected.
- Bald eagle (*Haliaeetus leucocephalus*) - State listed as endangered and fully protected.

*Conserving California's Wildlife Since 1870*

Mr. Bill Walker  
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Northern spotted owl (*Strix occidentalis caurina*) - State species of special concern (SSC).  
California spotted owl (*Strix occidentalis occidentalis*) - SSC  
Cooper's hawk (*Accipiter cooperii*) - SSC  
Ferruginous hawk (*Buteo regalis*) - SSC  
Sharp-shinned hawk (*Accipiter striatus*) - SSC  
Osprey (*Pandion haliaetus*) -SSC  
American peregrine falcon (*Falco peregrinus anatum*) - State listed as endangered and fully protected.

PA1-2  
cont.

The DEIR concludes that significant operational impacts to sandhill crane, bald eagle and various raptor and other avian species will occur (Impacts BIO-8, 9 and 11), due to turbine blade collisions. The DEIR proposes Mitigation Measure (MM) BIO-6 as mitigation for these impacts. MM BIO-6 proposes that mortality monitoring reports in conformance with the California Energy Commission's **California Guidelines for Reducing Impacts to Birds and Bats from Wind Energy Development** (CEC Guidelines) be conducted, and operational avoidance measures be implemented should annual mortality exceed certain species specific levels. DFG recommends the applicant be required to provide these reports to DFG by December 31 of any year in which turbines operate.

PA1-3

The DEIR correctly concludes that this mitigation measure will not fully avoid or adequately compensate for these impacts, and thus the impacts are still significant after mitigation. The DEIR establishes a standard of significance under which 5 sandhill crane mortalities per year or 3 bald eagle mortalities per year would be a significant impact. The DEIR also state that mortality of fewer than 5 sandhill cranes per year or 3 bald eagles per year due to wind turbine operations would result in no significant impact (respectively for these species) and no further need for continued mitigation pursuant to MM BIO-6.

Bald eagles, greater sandhill cranes and American peregrine falcons are State listed as threatened or endangered, and are fully protected. DFG cannot agree with an approach to mitigation that results in take of State listed bird species and does not fully mitigate all impacts on those listed species. It is unlawful pursuant to CESA (Code Section 2081) to take State listed species without a take permit. It is furthermore unlawful to take fully protected species pursuant to Code Section 3511, and no take permit for such species may be issued by DFG.

PA1-4

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DFG believes the threshold for the prevention of take should not be arbitrarily set as proposed in the DEIR. Due to the prohibition on the take of these bird species, DFG believes that the implementation of measures to avoid take must occur at any time monitoring efforts indicate mortality due to turbine operations of any birds protected under State law has occurred. (Take is defined as "hunt, pursue, catch, capture or kill, or attempt to hunt, pursue, catch, capture or kill".)

The above referenced MM BIO-6 calls for bird mortality monitoring efforts to be conducted for 5 years. It does not require that monitoring continue after 5 years regardless of the number of bird mortalities that are recorded. Public Resources Code (PRC) Section 21081.6(a)(1) requires that the County prepare and implement a Mitigation Monitoring and Reporting Program to assure compliance with and monitor success of all required mitigation "during implementation". Allowing the mortality monitoring per MM BIO-6 to cease after 5 years will not be consistent with CEQA because mortality of protected bird species requiring mitigation may occur beyond that 5 year time frame. Furthermore, since the project phasing plan does not clearly establish the degree to which the project will be built out within 5 years, the mortality monitoring effort should not be limited to that time frame. In order to determine that take does not occur, and that avoidance measures are implemented promptly to avoid take, monitoring efforts must continue until it can be demonstrated that take has not occurred and is unlikely to occur for an extended period of time. DFG suggests that the time frame for mortality monitoring must be established as the operational period for the project.

PA1-5

The forest surrounding the project is in an early seral successional stage. Information provided by the applicant to Shasta County indicates the primary land owner, Sierra Pacific Industries, replanted its holdings on Hatchet Ridge with a wide variety of conifer species. (Please see the plantation map provided by the applicant to Shasta County on September 18, 2007; a copy is enclosed.) As these plantation trees eventually mature into a conifer forest similar to surrounding lands, the attractiveness of the project site as habitat for a wider variety and greater number of birds than were discovered during avian counts in 2006 is likely to increase. Monitoring per the CEC Guidelines must continue as this plantation forest matures to assure that increased bird use of the site does not result in mortality of protected bird species.

PA1-6



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The DEIR does not discuss a full range of options for mitigation of significant impacts due to turbine collisions as required by CEQA. Instead, MM BIO-6 proposes several avoidance measures designed to minimize the number of bird mortalities, including operational timing restrictions and permanent shutdown or relocation of one or more turbines. The DEIR correctly concludes that the avoidance measures cited in MM BIO-6 are not expected to reduce impacts below potentially significant levels. CEQA requires that an impact which is considered significant must be mitigated either below the level of significance, or to the maximum extent practical. DFG suggests that other forms of mitigation including other minimization schemes and compensatory mitigation may be available. For example, the option of redesigning turbine placement for any turbines not yet constructed is not discussed. Additionally, repowering using latest technology may be a future option, as well as utilizing alternative designs or adjusting the height or rotor sweep of constructed or yet-to-be constructed turbines. Also, the DEIR does not discuss lighting schemes which may reduce attraction of birds at night, and does not discuss options for compensatory mitigation. The CEC Guidelines provide that compensatory mitigation for mortality at wind farms could include offsite conservation, protection, restoration or enhancement of essential habitat, or some combination of these. DFG staff is available to discuss with the County and the applicant the options for additional mitigation which may further reduce significant impacts on protected avian species.

PA1-7

PA1-8

PA1-9

The DEIR does not propose any additional avian use studies after project operations commence. The CEC Guidelines recommend that wind projects located within areas where mortality of protected species is expected due to turbine collisions should include at least one year of bird use counts during project operation, to provide a context for interpretation of fatality data, to provide insight into turbine-specific fatality patterns and to understand effects of turbines on bird behavior and distribution. DFG recommends a requirement for avian use surveys during early project operations be added to MM BIO-6.

PA1-10

Impact BIO-11 on page 3.4-22 states the project could result in direct mortality of special status raptors and other common and special status avian species. The discussion for this impact should specifically list all bird species for which mortality may potentially occur resulting in significant impacts. It is proposed that MM BIO-6 be implemented to mitigate for this impact. However, MM BIO-6 does not include any criteria for implementation specific to the species summarized in Impact BIO-11. No mortality thresholds for species other than bald eagle and sandhill crane are proposed by MM BIO-6. Consistent with the arguments provided in preceding paragraphs, DFG believes that any mortality of special status raptors should result in implementation of avoidance measures pursuant to MM BIO-6.

PA1-11

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The DEIR concludes that potential impacts to golden eagle (*Aquila chrysaetos*) (SSC and fully protected) are less than significant, because during the one year of avian surveys only one golden eagle was detected. However, we note that Table 3.4-3 predicts a high potential for occurrence of golden eagle, and that golden eagle are known to pass through the project area during migration. Consequently, DFG believes that take of golden eagle due to turbine operations is likely, and that impacts to golden eagle should be considered potentially significant.

PA1-12

A new overhead power transmission line up to 5 miles in length to deliver generated power to existing Pacific Gas and Electric transmission lines located near SR299 is planned. In its response to the NOP, DFG requested that the potential direct and indirect effects on birds and bats of power line conductors, towers and guy wires be examined by the EIR, and mitigation measures for any identified potentially significant impacts be designed and described. DFG finds that there is no specific discussion of the potential for operational impacts on birds from this power line. Impacts on sandhill crane migrations could be significant, since cranes are known to have particular difficulty in avoiding collisions with high voltage power lines. Sandhill cranes are known to migrate in large groups across Hatchet Ridge, as evidenced by the avian studies commissioned by the applicant (group of 30 birds) and by observances listed by Shasta Birders Association ([www.Birdersonthe.Net](http://www.Birdersonthe.Net)) (group of 50-60 birds, copy attached). Options for design mitigation may include wire spacing and tower and guy wire design, and additional mitigation should include the use of flight diverter devices installed on the conductors and guy wires to prevent bird collisions.

PA1-13

**Protection of Riparian Areas to Prevent Construction Impacts**

Impact BIO-6 on page 3.4-19 states that construction impacts to Cascades frog (*Rana cascadae*), yellow warbler (*Dendroica petechia brewsteri*) and willow flycatcher (*Empidonax traillii*) may be significant unless riparian areas are protected with an adequate construction buffer. MM BIO-3 is proposed to mitigate for this impact. However, MM BIO-3 contains no mitigation buffer requirement for riparian areas. DFG recommends that MM BIO-3 be amended to provide that all measures therein listed be applicable to riparian areas as well as wetlands and streams. DFG also typically recommends a minimum of 200 foot buffer from construction activities for nesting willow flycatchers and yellow warblers rather than the 100-feet suggested by MM BIO-5. If the appropriate buffer cannot be provided and impacts to willow flycatcher may result, an incidental take permit pursuant to Code Section 2081 will be required.

PA1-14

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**Notification Pursuant to Fish and Game Code Section 1602**

In its response to the NOP, DFG noted that the project proponent will be required to notify DFG under Division 2, Chapter 6, §1602 of the Fish and Game Code due to project activities associated with multiple stream crossings and roadway construction. DFG pointed out that the EIR must address the potential biological streambed alteration impacts and propose feasible mitigation. The DEIR does not provide details on the number or locations of these crossings. These details should be added to the DEIR and a description of the manner in which streams will be altered to accommodate road crossings should be included. If this information is not added to the DEIR, subsequent environmental review may be necessary prior to issuance of any Streambed Alteration Agreement pursuant to Code Section 1602. Additionally, Code Section 1613 provides that the DFG may suspend processing of a streambed alteration agreement if the project to which it pertains will violate any other section of the Code.

PA1-15

**Peer Review of Baseline Ecological Studies**

The "Peer Review of: Baseline Ecological Studies for the Proposed Hatchet Ridge Wind Project" (Peer Review, copy enclosed) was prepared by Jones and Stokes, Inc. and was forwarded to DFG staff on June 21, 2007. The Peer Review was intended to provide a second professional opinion on the avian surveys and other biological documentation prepared to date by the applicant, for the benefit of the County. The Peer Review Report was forwarded to DFG for comment by the County. In its response to the NOP, DFG concurred with the recommendations of this report. The Peer Review's recommendations of particular relevance to those made elsewhere in this letter are the recommendation to conduct pre-project auditory nocturnal surveys for owls, the recommendation to develop additional information to determine if migration corridors of various migratory species may pass over the project area, and the recommendation to more fully analyze the potential long term effects on bird use of plantation forest maturation on Hatchet Ridge. DFG finds that this report is not mentioned in the DEIR and the recommendations of the report are not addressed by the DEIR. DFG continues to believe that nocturnal surveys for owls should be conducted to determine the potential for night time owl use of the project area which was not revealed by the avian use surveys.

PA1-16

We note that responses to the NOP are not included with or cited as an appendix to the DEIR. Inasmuch as DFG's response to the NOP contained additional information on the regulatory status of species potentially affected by the project, and recommended additional migratory and nocturnal bird surveys which have not been completed or addressed by the DEIR, DFG's NOP response letter is included as an attachment to this letter.

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Please note that when filing a Notice of Determination in conformance with Public Resources Code Section 21152, environmental filing fees will be payable pursuant to Fish and Game Code Section 711.4 because the project will have an effect on fish and wildlife resources due to habitat alterations from turbine, road and power line construction, and turbine operation.

PA1-17

DFG anticipates that it will provide additional written and verbal comments during the public hearing process for this project, and will review the Final EIR during its review period. Thank you for the opportunity to comment on this project. If you have any questions regarding this information, please contact Staff Environmental Scientist Bruce Webb at (530) 225-2675.

PA1-18

Sincerely,

  
GARY B. STACEY  
Regional Manager

cc: Shasta County Planning Commission  
1855 Placer Street  
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State Clearinghouse  
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Sacramento, CA 95812-3044

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Mr. John Mattox  
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Mr. Scott Flint  
Habitat Conservation Planning Branch  
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Page Eight

cc: Mr. Bruce Webb and Dr. Richard Lis  
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**Peer Review of:**

***Baseline Ecological Studies for the Proposed Hatchet  
Ridge Wind Project, Shasta County, California***

**Prepared for:**

***Hatchet Ridge Wind, LLC***  
Portland, Oregon

**Prepared by:**

***Jones & Stokes***  
2600 V Street  
Sacramento, California  
Contact: Ed West, Ph.D.

## Introduction

Hatchet Ridge Wind, LLC (HRW) is evaluating the feasibility of developing a wind energy resource area on Hatched Ridge in Shasta County, California. In support of environmental impact evaluation for the project, HRW contracted with Western Ecosystems Technology, Inc (WEST) to design and implement a 12-month baseline study of ecological resources at the project site and vicinity. Field surveys were conducted to: 1) describe and quantify seasonal avian use of the proposed project area; 2) describe and quantify raptor use of the proposed project; 3) describe and quantify seasonal bat use of the proposed project; and 4) describe vegetation types and rate plant occurrences in the propose project area. The objectives of this study were to provide data that would be useful in evaluating potential impacts from the proposed project and assist in siting of the project facilities. The results of the study were presented in the West (2007) report: *Baseline Ecological Studies for the Proposed Hatchet Ridge Wind Project, Shasta County, California*

This report provides a peer review of the WEST report in meeting the stated objectives for the study. Three levels of analysis are included:

- Study design and success of implementation
- Scientific content and validity of conclusions based on available information and results, and
- Additional information needed to fully evaluate potential impacts.

This report first provides a general summary assessment of the report with regard to these factors. Detailed analyses and recommendations follow.

## General Assessment

The WEST studies were well designed, follow standard survey protocols and provide good baseline data for evaluating potential impacts that could arise from implementation and operation of the Hatchet Ridge wind resource facilities. The report is well written and logically structured. The figures and tables are well presented and provide essential data that support the text analysis. However, the conclusions regarding potential impact levels are fairly general, using relative comparisons (relatively low, some mortality, small numbers, minor effects, etc.), without range values needed to provide a clear picture of the potential magnitude of effects (e.g. seasonal and cumulative). Expanded analysis of these data are needed to more critically assess the validity of the conclusions made regarding the levels of potential impacts on the birds and bats that use the area. Fuller, more precise analysis of the seasonality, range and variability of use of the project area by potentially affected species is also needed to identify peak use periods and the magnitude of effect during which species are at highest risk. Additionally, assessment of ecological and species use changes that will occur during succession of the planted forest needs to be completed to evaluate future impacts that could occur to these and/or other species that are likely to be using the area then. Owls, particularly the California spotted



owl, need to be included in these analyses. Finally, more focused evaluation of known behaviors of species using the project area is recommended to more critically assess the probability of impacts to these species and/or species groups (e.g. flight patterns, migration behavior).

## Detailed Analysis and Recommendations

The following review identifies specific aspects of the report that would benefit from expanded and/or more detailed analyses relevant to evaluating the potential impacts to the birds and bats using Hatchet Ridge.

### Species Use Comparisons

#### Statistical Analysis

Numerous comparisons of bird and bat use of the Hatchet Ridge area are made in the report for analysis of differences between seasons (Figure 4), survey points (Figure 5) other wind resource areas (e.g. Figures 9, 11). However, these comparisons are based simply on mean values of species use without ranges (max, min.), standard error measures or sample size. This limited analysis is insufficient to allow rigorous statistical comparisons of the data sets. The conclusions drawn from the visual trends of the means may be correct, but measures of variability in the data no level of confidence can be established for the results. If the variability in the data is high, apparent differences between the means may not be significant and inferences regarding relative impact levels may not be valid, at least to the level stated in the report.

**Recommendation:** Provide more rigorous statistical analysis for these comparisons, using either with parametric or non-parametric statistics, as the data dictate. Use box and whisker plots (with mean, range and standard deviation) instead of histograms to compare data sets. This will allow rapid visual determination of the level of variability and actual overlap (similarity/difference) in data sets and potential for significance differences. Provide summary table of levels of significance in differences between mean use values. Re-evaluate and qualify conclusions on differences in species use between seasons, sites and WRAs based on these results.

#### Between Site Variability

Hatchet Ridge is unique in location, habitats, ecological and meteorological conditions, and species use compared to the other WRA identified in the report. Sufficient information detailing the differences between the other WRAs is currently not available in the report that would allow the reader to determine the actual level of "similarity" between sites and evaluate whether these sites are reasonably comparable without undue site-specific biases. Also no information is available in the report comparing the survey methods used in the different studies or whether they are consistent enough to allow unbiased comparisons.

**Recommendation:** Provide sufficient information on the different WRAs and methods of species use analysis at each site to validate the comparisons and conclusions made in the report. Provide the EIR team with copies of all cited references from which site specific data was obtained to allow independent analysis.

### **Precision of Seasonal Data**

The true level of risk (potential impact) to different species using Hatchet Ridge is likely to be strongly correlated with species abundance, species-specific risk prone behaviors, and the frequency of use of the area. Peak use periods of species that could move within the turbine rotor sweep area are likely to represent the periods of greatest impact to each species. These periods are commonly episodic, of short duration and are correlated with the prevailing movement dynamics (i.e. daily foraging pattern; migration) of each species. For example, both birds and bats can move through an area in large numbers over short periods during migration when favorable weather fronts occur. In evaluating the potential magnitude of turbines collision impacts to these species it is important to know when these peak use periods occur and what the approximate maximum numbers of birds or bats present are. Much of this information is currently masked (lost) in the report in that the authors use 3-month averages to determine seasonal use patterns. A finer tuned analysis (e.g. weekly) would allow greater precision in determination of these peak periods and impacts to each species. This information could be valuable in evaluating alternate seasonal operation schedules that would minimize impacts to migrating species, if justified.

**Recommendation:** Fine-tune the analysis of seasonal use by the different species to allow more precise determination of peak use periods. This information will also allow a more accurate assessment of the migration patterns in the different species/species groups using the Hatchet Ridge area (see below).

### **Migration**

The report states that Hatchet Ridge is not within a major migratory pathway and no obvious flyways or concentration areas were observed. However, available information suggests that Hatched Ridge may be within a bird and bat movement/migration corridor between the Modoc Plateau to the Sacramento Valley. Wind rose data show the prevailing winds in the area flow along this corridor. The flight path data for raptors and other large birds (Figure 6) show cross-ridge movement of many birds consistent with movement along this corridor. Seasonal variance in the species occurrence data at Hatchet Ridge shows population shifts consistent with migration. The majority of bird and bat species using the project area are migratory. These data suggest closer analysis of seasonal bird and bat movement patterns in the area is warranted to more fully evaluate the levels of migratory passage of these species across Hatchet Ridge.

**Recommendation:** Use the fine-tuned seasonal use data recommended above to assess movement patterns consistent with migration behavior. Review available published literature to assess whether species using Hatched Ridge are nocturnal migrants. Assess the potential for turbine collision impacts to nocturnal migrants.

### **Succession**

The vegetation community of project area consists primarily of an early stage plantation forest. The bird and bat species associated with this community are likely to change as the forest matures. It is important to know how the level and dynamics of collision impacts of different species may change over time as the forest matures.

**Recommendation:** Available published information on ecological succession in plantation forests similar to that on Hatchet Ridge should be used to determine potential changes in projected impacts over time. This would be particularly important for such special-status species as the California spotted owl that may use the forest with increasing frequency as the forest matures.

### **Owls**

Aside from one record of a northern pygmy-owl, no information on use of the Hatchet Ridge project area by owls is provided. Other species that could potentially use the area at night include the northern saw-whet owl, flammulated owl, great horned owl, long-eared owl and western screech owl. Use of the project area by these species is likely to change as the forest matures. High rodent density during the younger stages of forest development may favor high owl use. Use of the area by owls should be more fully evaluated.

**Recommendation:** Review available published literature on owl use of similar plantation forests at different stages of development. Conduct owl surveys of the area if possible.

### **Species-specific Behaviors**

It is stated in the report that turkey vultures show very low susceptibility to turbine collision in other WRAs in California, inferring that the same conditions would occur at Hatchet Ridge. However, despite 50% of raptors use data is comprised of turkey vulture observations, no flight patterns for this species are shown in Figure 6. Because each WRA is different, such site-specific information is needed to critically evaluate local impact potential for such species. Orloff and Flannery (1992) describe conditions for rolling hills, open field habitats, which are quite different from the forested ridgeline habitats of Hatchet Ridge. Frequent cross-ridge or along-ridge movement of this species due to differences in the distribution of thermals required for soaring could result in different levels of collision susceptibility at different WRAs.

**Recommendation:** More critical analysis of species-specific behaviors of this species, and others, that relate to impact susceptibility, should be provided where available. For example, Figure 6 shows frequent use of the Hatchet Ridge area by bald eagles, a special-status species. Also, recent studies indicate that bats may be attracted to ridgeline turbines as roosting sites, possibly due to a tendency to use natural snags for similar

purposes. These behaviors should be more fully evaluated relative to the potential for collision impacts of these and other species, as appropriate.

### **Bat Use Analysis**

The bat use data for Hatchet Ridge is limited to one location, at the met tower between bird survey stations 2 and 3 (Figure 2). This data may not be representative of the whole project area in that areas associated with riparian habitat (Figure 8) could attract greater numbers of bats (and different species?) that would forage there. Areas of lower elevation along the ridge may also favor movement of bats using orographic winds to reduce flight energy requirements.

**Recommendation:** The riparian areas and other areas along the ridge should be surveyed for bat use, if possible.

### **Species Displacement or Ecological Sink**

It is unclear whether the purported reduced avian diversity associated with wind farms is due to behavioral displacement of species as described in the report or possibly due to chronic local mortality of birds in the vicinity of the turbines (e.g. an ecological sink). Apparently the displacement of breeding golden eagles at Altamont Pass is a result of, at least in part, high mortality in local nesting birds.

**Recommendation:** Further evaluation of these different hypotheses is warranted.

### **Comments and Questions**

1. Provide more information on the location and extent of the overhead electrical collector cables that will be used to connect turbines along the ridge. These cables could potentially result in some level of collision mortality in addition to that from direct turbine collisions.
2. Is bird use correlated with topography (e.g. elevation, slope, aspect) of the survey stations, and if so would this relationship potentially result in higher mortality risk at different turbine sites along the ridge?
3. Ospreys and eagles commonly nest in exposed snags. Is there a potential for these species to be attracted to the turbines for this purpose?
4. What are the potential long-term cumulative mortality effects to species using Hatchet Ridge? Please provide approximate magnitude estimates (numbers, not percentages) based on comparable studies at other WRAs.
5. The report states that no impacts are expected to nesting raptors, yet an active bald eagle nest was documented at Lake Margaret in 2006 and Figure 6 shows frequent use of Hatchet Ridge by bald eagles that fly within the rotor-swept area. Given this information, is this definitive statement defensible?
6. The report states that the turbines that will be used at Hatchet Ridge will rotate at slower speeds than others used at other WRAs and this will reduce risk to some raptors. What is the actual tip speed of these larger turbines? Is it higher, lower, or

comparable to the turbines in other studies and what evidence is available that substantiates a reduced risk to raptors?



State of California – The Resources Agency

DEPARTMENT OF FISH AND GAME

<http://www.dfg.ca.gov>

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*use W-110*  
ARNOLD SCHWARZENEGGER, Governor



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JAN 29 2008

STATE CLEARING HOUSE

August 24, 2007

Mr. Bill Walker, Senior Planner  
Shasta County Department of Resource Management  
1855 Placer Street  
Redding, California 96001

Dear Mr. Walker:

4-16-07

**Notice of Preparation (NOP) and Related Documents  
Hatchet Ridge Wind Farm Draft Environmental Impact Report (EIR)**

The Department of Fish and Game (DFG) has reviewed Shasta County's (County) NOP for the subject project. Hatchet Ridge Wind, LLC, proposes the construction of up to 68 three-bladed wind turbines along a 6.5 mile corridor on Hatchet Ridge, extending north from a point approximately 0.5 mile north of State Route 299. The turbine towers would have a maximum height of 262 feet, and the turbine blades would be a maximum of 418 feet high to blade tip. The project would generate a maximum of 102 megawatts of electricity. An overhead transmission line and tower system up to 5 miles in length will be constructed to connect the turbine system to the existing PG&E transmission system. Pursuant to Section 15082(b) of the California Environmental Quality Act (CEQA) Guidelines, the DFG offers the following comments on the project in our roles both as a trustee agency and as a responsible agency.

The DFG has also reviewed the "Baseline Ecological Studies for the Proposed Hatchet Ridge Wind Project", provided to the DFG on May 15, 2007, the "Peer Review of Baseline Ecological Studies for the Proposed Hatchet Ridge Wind Project", provided to the DFG on June 22, 2007, and the "Draft Biological Assessment Hatchet Ridge Wind Project" provided to the DFG on June 25, 2007. Due to the reliance of the NOP and the County's environmental analysis on the data and conclusions drawn from these studies, the DFG has incorporated its comments on these studies into this response letter.

**Notice of Preparation**

The DFG agrees with the County's determination that an EIR should be prepared for this project. The project has the potential for substantial adverse impacts on birds, including migratory species, deer, bats, and may also adversely affect wetlands, streams, and sensitive plant species which may be present.

*Conserving California's Wildlife Since 1870*

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The DFG's natural diversity database (NDDB) indicates that the special status plant species, Butte County morning glory (*Calystegia atriplicifolia* ssp. *buttensis*) and English peak greenbriar (*Smilax jamesii*) are present in the vicinity of the proposed project. Table 1 (enclosed) summarizes the typical habitat(s), geographic distribution, number of known occurrences in the NDDB, the NDDB State rank, the California Native Plant Society (CNPS) list status, and the CNPS list and threat code for these rare plants. Based on the existing scientific and factual information for these species, the DFG has concluded that they meet the criteria set out in Section 15380(b) of the CEQA Guidelines and, therefore, shall be considered rare or endangered species per Section 15380(d) of the CEQA Guidelines.

DFG recommends that field survey(s) be conducted in accordance with the DFG's "Guidelines for Assessing the Effects of Proposed Projects on Rare, Threatened, and Endangered Plants and Natural Communities (revised May 8, 2000)" to determine whether sensitive plant species are present. Species-specific mitigation recommendations for sensitive plant species present within the project area should be included in the EIR.

DFG's NDDB indicates the presence of bald eagle (*Haliaeetus leucocephalus*) nesting sites and territories. DFG's species occurrence information also indicates that northern spotted owl (*Strix occidentalis caurina*) critical habitat (per U.S. Fish and Wildlife Service) and northern spotted owl territories occur in the vicinity of the project. The bald eagle has been de-listed by the U.S. Fish and Wildlife Service; it is State listed as endangered, and is fully protected pursuant to Fish and Game Code (Code) Section 3511. As such, no take permit pursuant to the California Endangered Species Act (CESA) may be issued for bald eagle. The bald eagle also remains protected by the Federal Bald and Golden Eagle Protection Act. The bald eagle and northern spotted owl are also protected under the Federal Migratory Bird Treaty Act (MBTA). The northern spotted owl is federally listed as threatened. Additionally, take of any raptor or raptor nest or eggs is prohibited pursuant to Code Section 3503.5. The NOP also indicates that the project may have a potentially significant impact on avian and bat species moving through the turbine area. The short and long term effects on wildlife of the wind turbine construction and the effects of turbine operations over the life of the project must be examined by the EIR, and feasible mitigation through design modifications, operational restrictions or other means must be proposed to prevent mortality and injury to bald eagle, to minimize mortality and injury to all other avian species and bats and to prevent mortality or injury to fully protected species which may be present.

DFG's species conservation mapping indicates that the Hatchet Ridge area, extending north approximately 8 miles from a point approximately 0.5 miles north of State Route (SR) 299, is designated by DFG as critical deer fawning habitat. DFG understands that no perimeter fencing is planned for the project, but that security fencing will be required around maintenance and power substation control building sites. Any fences around these sites must be designed to exclude deer, including fawns, without injury and preclude jumping attempts.

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The NOP does not provide detailed information on the extent of wetlands or riparian vegetation that may be affected by the project. However, the NOP states that project road work may impact existing seasonal and headwaters streams, including Little Hatchet, Roaring and Goose creeks and their associated riparian vegetation. The project also proposes 7 miles of buried communications cables and an unspecified length of buried power cables, which may also cross these streams and affect riparian vegetation. It is the DFG's policy to ensure that proposed projects will result in no net loss of wetland or riparian vegetation habitat values or acreage. Analysis of potential impacts to wetlands and sensitive wetland species should include an evaluation of the potential for direct, indirect, and cumulative impacts to these resources. The DFG requests that surveys be performed to evaluate potential losses of seasonal, intermittent or perennial streams and aquatic, wetland, or riparian habitats and sensitive species which depend on these habitats, which might result from project activities. Direct impacts to these features should be avoided to the greatest extent possible and secondary impacts reduced through implementation of adequate setbacks to protect these resources. Indirect impacts to wetlands may include hydrological changes, human intrusion into the wetlands (off-road vehicle use, dumping, spilling toxic substances) and the drainage of silt or petroleum products from project construction or operations into the wetland. All riparian habitats along these streams should be protected with adequate buffer zones and other measures necessary to prevent impacts to water quality and wildlife resources. Unavoidable impacts to these habitats should be quantified and appropriate mitigation measures adopted.

Project activities associated with multiple stream crossings and roadway construction will result in modifications to streambeds or banks. The project proponent is required to notify DFG under Division 2, Chapter 6, §1602 of the Fish and Game Code prior to undertaking any of these activities. When notified, DFG will determine whether or not a streambed alteration agreement (Agreement) is required. This Agreement will include conditions to protect fish and wildlife resources, habitat, and water quality that are mutually agreed to by DFG and the project proponent. In issuing an Agreement, DFG will be acting as a "Responsible Agency" under CEQA. DFG is required by CEQA Guidelines §15096 to review the CEQA document certified by the lead agency approving the project and, from that review, to make certain findings concerning the activities' potential to cause significant, adverse environmental effects. It is, therefore, important that the EIR address all of the potential biological streambed alteration impacts and propose feasible mitigation.

The NOP indicates that the project area is in part owned by Sierra Pacific Industries, and that their holdings were planted after the 1992 Fountain Fire with a ponderosa pine (*Pinus ponderosa*) plantation monoculture. During a field visit to the site accompanied by staff of the County's CEQA consultant, Jones and Stokes, Inc. (J. and S.), Staff Environmental Scientist Bruce Webb observed a diversity of conifer



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species along the ridge line access roads, including incense cedar, white fir, Douglas fir, ponderosa pine, lodgepole pine and possibly other conifer species, in a variety of age classes. This diversity of conifer species appears to extend for most of the length of the ridge access roads, and extends an unknown distance up and downslope from the roads. It appears to be primarily volunteer trees but may also include planted stock. The Jones and Stokes representatives accompanying Mr. Webb corroborated these observations. DFG requests that the existing vegetation community within the project area, including but not limited to the forest community along the ridge line where the turbines will be located, be accurately described by maps in the EIR. This information must be used to complete the analysis of the potential for short and long term, direct and indirect effects on wildlife, rather than relying on the assumed ponderosa pine monoculture as the primary available habitat within the planned turbine corridor.

Project plans call for construction of a new overhead power transmission line extending approximately 1.25 miles along an existing power line route parallel to the ridge, and continuing in a new alignment up to an additional 3.5 miles to a new substation site (based on power line mapping plans provided by J. and S.). The new transmission line will collect generated turbine power and deliver it to existing Pacific Gas and Electric transmission lines located near SR299. DFG understands the alignment and length of the new transmission line have not been finalized. Construction of the new transmission line, and its long term operation, could cause injury and mortality to avian species. The potential direct and indirect effects on birds and bats of power line conductors, towers and guy wires must be examined by the EIR, and mitigation measures for any identified potentially significant impacts should be designed and described. Options for design mitigation may include wire spacing and tower and guy wire design, and additional mitigation could include the use of flight diverter devices installed on the conductors and guy wires to prevent bird collisions.

The California State Energy Commission (Commission), in cooperation with DFG, has prepared draft "**California Guidelines for Reducing Impacts to Birds and Bats from Wind Energy Development**" (Guidelines). The Guidelines are intended to provide recommended methods to assess bird and bat activity at proposed wind energy sites, design pre- and post-construction monitoring and adaptive management plans, and develop and implement impact avoidance, minimization and mitigation measures. The Guidelines have been in final draft form and posted on the Commission's website since April 4, 2007, and have been circulated for comment and refinement to many cooperating agencies and experts in the wind energy field. A final citable version of the Guidelines dated July 2007 has been posted on the Commission's website on July 17, 2007, and is now intended for use by lead agencies and project planners. DFG recommends that the EIR include a comparative analysis of the bird and bat survey protocol recommendations in the Guidelines with those that have been conducted by the applicant to date, or are proposed to be conducted prior to construction. The EIR should disclose those survey activities conducted to date which are consistent in design

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and scope with recommendations of the Guidelines, and should provide justification for omitting surveys which may be recommended by the Guidelines based on project specific criteria. The EIR should also discuss the potential applicability to the project of the Guideline's recommended adaptive management strategy options.

Please note that when filing a Notice of Determination in conformance with Public Resources Code Section 21152, environmental filing fees will be payable pursuant to Fish and Game Code Section 711.4 because the project will have an effect on fish and wildlife resources due to habitat alterations from turbine, road and power line construction, and turbine operation.

As noted above, the applicant has forwarded three additional documents which discuss potential impacts to birds and bats from operation of the turbines. DFG provides the following comments on these documents to assist the applicant and the County in determining their adequacy in supporting the necessary analysis of impacts to birds and bats from the turbine operations.

#### **The Baseline Ecological Studies**

The "**Baseline Ecological Studies for the Proposed Hatchet Ridge Wind Project**" dated March 2007 has been prepared by WEST, Inc. (WEST) at the request of the applicant. The report presents the results of a one year long bird and bat survey on Hatchet Ridge, commencing November 2005 and concluding November 2006. Point surveys were conducted at six (6) fixed locations. Observations were conducted once per week for 30 minutes at varying daytime hours. Observations were recorded, and an attempt was made to record vectors of flight paths when discernible. No nocturnal bird surveys were conducted. The day time surveys revealed the presence of a number of bird species, including a diversity of migratory birds and raptors.

DFG notes that during the one year of point survey observations only one owl sighting was recorded. Since owls are active typically only at night, it is inconclusive whether the surveys indicate the Hatchet Ridge area is unusually sparsely populated by owls, or they were simply not detected because the surveys were not conducted during periods when most owls are active. Owl species that may be present in the vicinity of Hatchet Ridge include saw-whet, flammulated, great horned, long-eared, western screech and as noted above, northern spotted. DFG recommends that nocturnal surveys for owls be conducted using standard recorded-call auditory techniques. DFG believes that these surveys should be commenced as soon as appropriate for the survey methodology, but can be undertaken independently of release of the EIR, provided the survey need and intended survey protocol is described in the EIR, the and recommended mitigation are

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options for mitigation strategies are fully disclosed by the EIR and the survey results incorporated into the Final EIR and project design. DFG welcomes the opportunity to assist the applicant and the County to design an auditory survey effort for owls.

DFG notes that surveys conducted to date have provided incomplete information on potential flight patterns of migratory birds, and did not attempt to survey for night time migration using radar. However, DFG notes that many of the bird and bat species using the project area are migratory. Hatchet Ridge is uniquely located between the Sacramento Valley and the Modoc Plateau, suggesting that migration is likely across or in the vicinity of Hatchet Ridge. Additionally, data collected by WEST on flight paths of observed migratory species across Hatchet Ridge are consistent with migration. In order to determine if observed flight vectors represent prevalent migratory behavior, DFG recommends that additional studies be undertaken, including night time radar migration observations, to determine if existing migration corridors may place migrating species at risk of turbine collisions. These surveys should be commenced as soon as possible, but can be undertaken independently of release of the EIR, provided the survey need and intended survey protocol is described in the EIR, the options for mitigation strategies are fully disclosed by the EIR and the survey results and recommended mitigation are incorporated into the Final EIR and project design. DFG welcomes the opportunity to assist the applicant and the County to design a radar survey effort during night time hours for migratory birds.

#### **The Peer Review of Baseline Ecological Studies**

The "**Peer Review of: Baseline Ecological Studies for the Proposed Hatchet Ridge Wind Project**" (Peer Review) was prepared by J. and S., and is intended to provide a second professional opinion on the survey and other biological documentation prepared to date by the applicant. DFG has reviewed the document and concurs with all of its recommendations. The Peer Review's recommendations of particular relevance to those made elsewhere in this letter are the recommendation to conduct auditory nocturnal surveys for owls, and the recommendation to develop additional information to determine if migration corridors of various migratory species may pass over the project area.

#### **The Draft Biological Assessment**

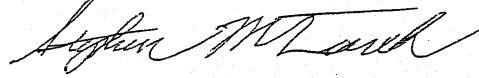
The "**Draft Biological Assessment Hatchet Ridge Wind Project**" dated June 2007, was prepared by WEST at the request of the applicant. It was prepared to provide an analysis of whether the project may adversely affect species listed as threatened or endangered by the Federal Endangered Species Act (ESA). Although no apparent nexus with a permitting federal agency has been identified, the applicant chose to prepare the BA to analyze potential effects on species listed by the ESA.

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The BA states that the bald eagle is federally listed and may be affected by the project. It should be noted that the bald eagle has been de-listed by the U.S. Fish and Wildlife Service; it is State listed as endangered, and is fully protected pursuant to Fish and Game Code (Code) Section 3511. As such, no take permit pursuant to the California Endangered Species Act (CESA) may be issued for bald eagle. The bald eagle also remains protected by the Federal Bald and Golden Eagle Protection Act. Two alternate bald eagle nest sites, representing one nest territory, are known to be recently active on and near Lake Margaret, approximately 1.75 miles and 1 mile east from the project site boundary, respectively. The BA also notes that during fixed point bird count surveys, 11 bald eagle sightings were made within the project area. Based on ratios of total raptor use, and mortality ratios from other similar wind farms currently in operation, the BA concludes that one bald eagle every 2-3 years may be killed by the turbines. The BA concludes that this is an insignificant number of fatalities, because it is immeasurable and is unlikely to occur. This conclusion is not adequately explained and does not appear to be supported by the data presented. Furthermore, one bald eagle fatality every 2-3 years could have a significant adverse impact balanced against the reproductive success of the local nest territory, and would be a violation both of the Bald and Golden Eagle Protection Act and CESA.

Thank you for the opportunity to comment on this project. If you have any questions regarding this information, please contact Staff Environmental Scientist Bruce Webb at (530) 225-2675.

Sincerely,



for GARY B. STACEY  
Regional Manager

cc: See Page Eight

Mr. Bill Walker  
August 24, 2007  
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cc: Ms. Amy Fesnock  
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Sacramento, California 95825

Mr. Bruce Webb and Dr. Richard Lis  
Department of Fish and Game  
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**Table 1 – Disposition and Status of Rare, Threatened and Endangered Plants Occurring Near the Hatchet Ridge Wind Farm Project**

Species	Habitat	California Distribution	Approximate Elevation	NDDB Occurrences	State Rank	CNPS List
Butte County morning glory ( <i>Calyptegia atriplicifolia ssp. buttensis</i> )	Lower montane coniferous forest /rocky, sometimes roadside	Butte, Contra Costa, Del Norte, Mendocino, Shasta, Tehama counties	1,950 to 4,950 Feet	50	S3.2	1B.2
English peak greenbriar ( <i>Smilax jamesii</i> )	Lower/upper montane coniferous forests	Del Norte, Shasta, Siskiyou, Trinity counties	1,885 to 8,125 Feet	50	S3.2	1B.3

Cit:

1. California Native Plant Society (CNPS), 2007. Inventory of Rare and Endangered Plants (online edition, v7-07a). California Native Plant Society, Sacramento, CA. Accessed June 26, 2007 from <http://www.cnps.org/inventory>.
2. California Natural Diversity Database, "EnQuery 2".

**TABLE 1 NOTES:**

<p><b>CNPS List</b></p> <p>1A Plants presumed extinct in California.                  1B Plants rare, threatened or endangered in California and elsewhere.                  2 Plants rare, threatened, or endangered in California but more common elsewhere.                  4 Limited distribution or infrequent throughout a broader area in California. Not rare but uncommon enough that status should be monitored regularly.</p> <p><b>Modifications Associated with R-E-D Code Discontinuation</b></p> <p>o A new Threat Code extension has been added following the CNPS List (e.g., 1B.1, 2.2 etc.). This extension replaces the E (Endangerment) value from the R-E-D Code. The main difference is that the number coding is now reversed to reduce confusion and represent this information in parallel with the threat rankings that the California Natural Diversity Database (CNDDB) uses. Therefore the logic is reversed so that the lower the number, the higher the corresponding threat level.</p> <p><b>New Threat Code extensions and their meanings:</b></p> <p>1 -- Seriously endangered in California.                  2 -- Fairly endangered in California.                  3 -- Not very endangered in California.</p>	<p>Note that all List 1A (presumed extinct in California) and some List 3 (need more information – a review list) plants lacking any threat information receive no threat code extension. Also, these Threat Code guidelines represent a starting point in the assessment of threat level. Other factors, such as habitat vulnerability and specificity, distribution, and condition of occurrences, are also considered in setting the Threat Code.</p> <p><b>State Rank</b></p> <p>S1 Less than 6 element occurrences or less than 1,000 individuals or less than 2,000 acres.                  S2 6-20 element occurrences or 1,000-3,000 individuals or 2,000-10,000 acres.                  S3 21-100 element occurrences or 3,000-10,000 individuals or 10,000-50,000 acres.</p> <p><b>Threat Designation (attached to State rank as a second number)</b></p> <p>1. Very threatened.                  2. Threatened.                  3. No current threats known.</p>
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## Letter PA1 California Department of Fish and Game, Northern Region

### Response to Comment PA1-1

This comment reiterates the project description presented in the Draft EIR and identifies the California Department of Fish and Game's role as both trustee and responsible agency under CEQA.

### Response to Comment PA1-2

The California Department of Fish and Game's comments provided in response to the NOP are noted in this comment. The California Department of Fish and Game further identifies the avian species addressed in Section 3.4, *Biological Resources*, of the Draft EIR.

### Response to Comment PA1-3

Mitigation measure BIO-6 has been revised. It now requires completion of annual reports, submittal of these reports to California Department of Fish and Game, and public availability of the data. Also, the measure now includes a requirement to establish a Technical Advisory Committee (TAC) with the California Department of Fish and Game as a participant.

### Response to Comment PA1-4

Potential impacts are mitigated to the maximum extent practicable. Based on additional coordination with the California Department of Fish and Game and the project applicant subsequent to release of the Draft EIR, additional mitigation to reduce and compensate for this impact have been added. Additional mitigation items are listed below.

- Completion of annual monitoring reports to be submitted to the California Department of Fish and Game.
- Development and implementation of an avian mortality monitoring/adaptive management plan, including formation of a Technical Advisory Committee for making recommendations to the County.
- Revising the timeframe for monitoring to extend beyond the 2-year horizon recommended by CEC guidelines until mortality events remain below the thresholds.

In addition, the applicant has agreed to provide offsite compensatory mitigation. See the complete revised text of Mitigation Measure BIO-6 in Chapter 3 of this Final EIR.

### Response to Comment PA1-5

Mitigation Measure BIO-6 has been revised to require that monitoring be conducted and continued beyond the 2-year horizon if mortality thresholds are exceeded.

### Response to Comment PA1-6

Intensively managed conifer forest does not provide high-quality habitat for protected species; consequently, maturation of the forest surrounding the project area is not likely to result in an increase in bird use of the project area, although the relative abundance of some species may change. As long as the forest in the project area is managed for commercial timber harvest, it is very unlikely that the forest there will develop characteristics of older-aged forests that could provide habitat capable of supporting special-status wildlife species.



### **Response to Comment PA1-7**

The project as currently designed does not anticipate “phasing” construction. Consequently, “redesigning turbine placement for any turbines not yet constructed” and several of the other example “minimization schemes” provided in the letter are not feasible. Repowering would constitute a separate project under CEQA and would require its own special use permit and environmental review. The revisions to the EIR include more options for mitigation. The potential impacts have been mitigated to the maximum extent practical without rendering the project infeasible.

### **Response to Comment PA1-8**

Most studies to date have shown no relationship between lighting and bird and bat mortalities; accordingly, the suggested minimization measure is unlikely to have any effect. However, a new element has been added to Mitigation Measure BIO-6 to allow for implementation of these or other technologies if new information becomes available to the Technical Advisory Committee indicating that their use may have an appreciable beneficial effect.

For this project, the potentially significant impacts with a reasonably predictable probability of occurrence are impacts on bald eagle and sandhill crane, species that do not frequently occur in the project area but may pass through during the winter and migration. Because the species most likely to be significantly affected and the habitats capable of supporting them do not occur in the project area, it is extremely difficult to devise an onsite compensation scheme that can reasonably be linked to the specific population being affected. Accordingly, Mitigation Measure BIO-6 has been revised to include offsite compensatory mitigation as one component of the BIO-6 mitigation package for these species.

There is no existing program funded by mitigation fees that has been established by the County or the state. In the absence of such a program, the EIR must identify mitigation measures that can be “fully enforceable through permit conditions, agreements, or other legally binding instruments”; that can establish an “essential nexus (i.e., a connection) between the measure and a legitimate government interest”; and that are “roughly proportional to the impact of the project.” In consultation with the California Department of Fish and Game, Mitigation Measure BIO-6 has been revised to include a mitigation measure decision framework to be used by the County and the Technical Advisory Committee for implementing compensatory mitigation.

### **Response to Comment PA1-9**

Subsequent to release of the Draft EIR, the EIR preparers and the applicant coordinated with the California Department of Fish and Game to refine mitigation measures and add new mitigation measures to address avian impacts. See the response to Comment PA1-4.

### **Response to Comment PA1-10**

See revised Mitigation Measure BIO-6 in Chapter 3 of the Final EIR. The revisions were made in consultation with the California Department of Fish and Game, the Shasta County Department of Resource Management, and the applicant. The mitigation program outlined in the mitigation measure may include avian use studies if the Technical Advisory Committee determines that such studies are necessary.

### **Response to Comment PA1-11**

Mortality thresholds for diurnal raptors, owls, and yellow warbler have been added to Mitigation Measure BIO-6.

### **Response to Comment PA1-12**

The characterization of golden eagle occurrence and use of the project area was an error in the Draft EIR that has been corrected in Table 3.4-3 from the Draft EIR (see Section 3.5.1 of the Final EIR for the revised table). There is no habitat capable of supporting golden eagle in the project area and only one golden eagle was observed during avian use studies, leading to the correct conclusion that impacts on golden eagles, if they occur, would likely be very low.

### **Response to Comment PA1-13**

While it is true that sandhill cranes have been documented to suffer mortality from collision with transmission lines, these mortalities have been documented in areas containing habitat capable of supporting sandhill cranes—i.e., areas where they rest and forage. No such habitat exists in the immediate vicinity of the project area and there is nothing in the project area to attract sandhill cranes. Sandhill cranes only infrequently occur while migrating over the project area, typically at altitudes much higher than the height of the transmission lines. Consequently, this impact is unlikely to occur. However, upfront compensatory mitigation for sandhill cranes has been added to Mitigation Measure BIO-6.

### **Response to Comment PA1-14**

Mitigation Measure BIO-3 has been amended to include a 250-foot setback in areas capable of supporting special-status species.

### **Response to Comment PA1-15**

As currently designed, the roads associated with the proposed project do not entail any stream crossing subject to California Department of Fish and Game jurisdiction. Accordingly, such crossings were not addressed in the Draft EIR.

### **Response to Comment PA1-16**

The project area is a commercial timber harvest area and is therefore unsuitable for most owl species. Conducting nocturnal owl surveys would be highly unlikely to provide any additional information on potential impacts on owls; such impacts are predicted to be minimal because of the type of habitat occurring in the project area. Subsequent to publication of the Draft EIR, a nocturnal migration study was conducted. The reports detailing the finding of this study and an evaluation of the study conducted on behalf of the Wintu Audubon Society are provided as Appendices B and C of the Final EIR. It is noted that the California Department of Fish and Game's responses to the NOP are included as an attachment to the letter.

### **Response to Comment PA1-17**

The California Department of Fish and Game provides information regarding its environmental filing fees.

### **Response to Comment PA1-18**

Shasta County acknowledges the California Department of Fish and Game's interest in participating in the public hearing process.

STATE OF CALIFORNIA—THE RESOURCES AGENCY

Letter PA2  
ARNOLD SCHWARZENEGGER, Governor

**DEPARTMENT OF FORESTRY AND FIRE PROTECTION**

875 Cypress Avenue  
Redding, CA 96001  
Website: [www.fire.ca.gov](http://www.fire.ca.gov)  
(530) 225-2418



January 29, 2008

Shasta County Department of Resource Management  
1855 Placer Street, Suite 103  
Redding, Ca. 96001

Dear Mr. Bill Walker,

In regard to the Hatchet Ridge Wind Project, SCH # 2007042078, the Department of Forestry and Fire Protection (CAL FIRE) has the following comments:

By policy, the Board of Forestry and CAL FIRE cannot support any project that will reduce the timberland base of California. Public Resources Code of the State of California (PRC) 4526 defines what timberland is. It is CAL FIRE's responsibility to maintain, protect and enhance long-term timber production and the associated preservation of the timberland base. However, CAL FIRE recognizes the need for non carbon producing energy sources and that if current zoning and the intended use are consistent with the county's general plan; and if, after review, no land other than timberland can be identified to suite the project; then CAL FIRE may choose not to oppose the project.

PA2-1

After reviewing the EIR, CAL FIRE has developed the following list of concerns and recommendations:

Fire Protection

1. The project is located within an area designated as a "VERY HIGH" Fire Hazard Severity Zone under Section 4203 PRC. With this rating and the throw potential from the turbines being 550 feet, the applicant shall clear all trees and brush within 550 feet of all towers. This shall be maintained for the life of the facility.
2. In accordance with PRC 4291 (a), the applicant shall provide "Defensible Space", by removing all flammable vegetation from around all buildings for a minimum of 100 feet or to the property line, whichever is closer.
3. In accordance With PRC 4427 and 4428 the applicant shall have the required fire tools on site during operations and within all vehicles being used for operations.

PA2-2

PA2-3

PA2-4

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JAN 30 2008

COUNTY OF SHASTA  
PERMIT COUNTER

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Mr. Bill Walker  
 January 29, 2008  
 Page Two

Resource management

- |  |               |
|--|---------------|
| <p>4. The existing roads system, the Bunchgrass Lookout Road and spurs, has been sufficient to accommodate several timber management entrees in the past. This includes the Fountain Fire salvage and the several entries needed to have successful regeneration and plantation of the burned area. With the adequacy of the road system in the past it appears that the additional new roads are not needed for timber management. Are any existing roads to be abandoned to mitigate the additional loss to timber growing acres?</p>  | <p>PA2-5</p>  |
| <p>5. It is unclear which of the proposed roads are to be permanent and which are to be temporary. Are all of the proposed roads delineated on figure 2-1 permanent?</p>   | <p>PA2-6</p>  |
| <p>6. Are the temporary (136 acres) and permanent (73 acres) calculated using the 44 turbine locations mapped on figure 2-1 or the 68 potential locations? Additionally is the total area of the footings calculated using the pier-type footings (256 square feet) or the spread footing foundations (1600 square feet)?</p>  | <p>PA2-7</p>  |
| <p>7. The project proposes 209 acres (temporary and permanent conversion acres), that will have all the trees removed from a 12 year old plantation. Additionally substantial more acres (550 feet clearance around towers) will need fuels treatment. The material created will need to be treated for forest and fire protection reasons. How is all the material to be treated? Is it to be piled and burned, chipped in placed, or removed as biomass? Which ever treatment is to be used, the appropriate permits shall be required from the respective agencies (CAL FIRE, Air Quality).</p> | <p>PA2-8</p>  |
| <p>If any commercial timber operations (as defined by PRC 4527) are involved with a project, they must be approved by CAL FIRE prior to undertaking operations. A Timber Harvesting Plan (THP) or equivalent may be required. No commercial operations may occur until the appropriate plans and permits are approved.</p>   | <p>PA2-9</p>  |
| <p>8. The statement on page 3.2-5, "The project area, or portions of the project area may be determined to be exempt from TCP requirements upon evaluation by Cal Fire under 14 CCR 1104.1(b) or (c), which allows for the "harvesting of trees in order to construct or maintain a right of way by a public agency, public or private utility that is exempt from the requirements to obtain a TCP or file a THP.", is correct and several portions of the project have defined right-of-way clearances established in 14 CCR 1104.1 (d), (e),</p>  | <p>PA2-10</p> |

Mr. Bill Walker  
January 29, 2008  
Page Three

(f), and (g). Other portions of the project do not have established right-of-way widths (the turbines), and some portions of the project may not be covered by the exemption (permanent roads outside the right-of-ways and the O&M building). A Timber Conversion Permit (TCP) may still be required.

PA2-10  
cont.

**PRC 4527. Timber operations.** "Timber operations" means the cutting or removal or both of timber or other solid wood forest products, including Christmas trees, from timberlands for commercial purposes... "Commercial purposes" includes: (1) The cutting or removal of trees which are processed into logs, lumber, or other wood products and offered for sale, barter, exchange, or trade, or; (2) The cutting or removal of trees or other forest products during the conversion of timberlands to land uses other than the growing of timber which are subject to the provisions of Section 4621, including, but not limited to, residential or commercial developments, production of other agricultural crops, recreational developments, ski developments, water development projects, and transportation projects.

Prior to project construction, a Public Agency, Public and Private Utility Right-Of-Way Exemption and/or a TCP will need to be on file with CAL FIRE,

PA2-11

Thank you for the opportunity to comment on this project.

Sincerely,



Benjamin C. Rowe  
Forester I, RPF 2686  
CAL FIRE  
Shasta -Trinity Unit  
(530) 225-2508

## Letter PA2 California Department of Forestry and Fire Protection

### Response to Comment PA2-1

This comment presents California Department of Forestry and Fire Protection's (CAL FIRE's) duty to oppose projects that reduce timberland, but also expresses its support of non-carbon-producing energy sources.

### Response to Comment PA2-2

CAL FIRE correctly identifies the project site's designation as a "Very High" Fire Hazard Severity Zone under 4203 PRC. The comment concludes that due to this designation, as well as a "throw potential of 550 feet," the applicant should be required to clear all trees and brush within an area of 550 feet of each turbine and maintain this clearance for the life of the project.

Section 3.7.2 of the Draft EIR (Impact HAZ-6 identifies the potential for turbine or meteorological tower failure and blade or ice throw. This impact discussion references a hazard zone analysis study conducted on another wind project in California. Based on the conclusions of the study, the maximum throw distance for a blade for a 2.4 MW turbine would be slightly more than 542 feet. This distance is estimated to demonstrate that there is no chance that blade throw could reach SR 299, located some 2,640 feet from the nearest turbine.

It is assumed that CAL FIRE's suggested clearance distance of 550 feet is based on this discussion in Section 3.7 of the Draft EIR. This discussion was included in the Draft EIR to address a potential public safety concern related to SR 299; it has no relevance to wildland fire hazard. The presence of trees would actually mitigate the public safety concern by providing a barrier/buffer in the case of blade or ice throw. In addition, Mitigation Measure HAZ-8 provides design and safety mechanisms to minimize this potential impact to a less-than-significant level.

Accordingly, based on the information provided in CAL FIRE's comment, there is not an adequate rationale for a 550-foot clear zone around turbines. In fact, if such a clear zone was required, it would conflict with the applicant's and lead agency's goal of minimizing wildlife habitat impacts and minimizing timberland conversion from increased acreage disturbance. The requested additional acreage disturbance would also increase the significant and unavoidable impact on aesthetics and visual resources.

As disclosed in Section 3.7.2 of the Draft EIR, any vegetation clearing (up to 100 feet around buildings and structures) and salvage activities may require approval from CAL FIRE.

*Subsequent to the submittal of this January 29, 2008, comment letter by CAL FIRE and the January 21, 2008, letter from the Shasta County Fire Department, the applicant met with CAL FIRE and the Shasta County Fire Department to coordinate on fire safety requirements. Based on that coordination, these agencies have a better understanding of the project, and the Shasta County Fire Department and CAL FIRE have submitted letters (dated May 22, 2008, and May 27, 2008, respectively) revising their fire safety requirements for the project. These requirements will become conditions of approval if the proposed project is approved by the County. See Appendix D, Fire Safety Requirements, for copies of the letters containing updated comments from these agencies.*

*The requirements related to fuel breaks have been updated from the original comment letter. The original recommendation to clear all trees within 550 feet of the towers has been revised to require the following specific vegetation modifications.*

*Turbine Ridge Road:*

- Provide a 100-foot shaded fuel break on the western side of Turbine Ridge Road.
- From the centerline of Turbine Ridge Road going east, provide a 50-foot clear zone.
- From the easternmost edge of the clear zone, provide an additional 100-foot shaded fuel break.

*Turbines:*

- From the outer edge of each tower, going in all directions, provide a 30-foot clear zone.
- From the outer edge of the clear zone, going in all directions, provide an additional 70-foot shaded fuel break.

*Definitions and specifications for the clear zones and shaded fuel breaks are provided in Appendix D. Potential impacts of the proposed fuel breaks would not be significantly different from the impacts already disclosed in the Draft EIR.*

**Response to Comment PA2-3**

Comment noted. The defensible space requirement will be included as a condition of approval of the proposed project. All flammable vegetation within 100 feet of buildings will be removed. Also see the response to Comment PA2-2 and Appendix D.

**Response to Comment PA2-4**

Comment noted. Required onsite and in-vehicle fire tools (per PRC 4427 and 4428) will be included as a condition of approval of the proposed project. Also see the response to Comment PA2-2 and Appendix D.

**Response to Comment PA2-5**

At this juncture, neither the applicant nor the landowner has indicated any plans to abandon existing roads.

**Response to Comment PA2-6**

All new roads installed for project construction and access will be permanently maintained.

**Response to Comment PA2-7**

Acreages of proposed disturbance are based on the applicant's preferred arrangement of 44 turbines.

**Response to Comment PA2-8**

All appropriate permits will be obtained before any treatment of biomass that results from clearing of the vegetation associated with project construction. All such activities will be conducted in compliance with Air Quality Management Regulations as well as state and local fire agency burning permit requirements.



### **Response to Comment PA2-9**

Pursuant to state regulations, the applicant will coordinate and obtain all necessary permits and approvals from CAL FIRE prior to project installation. See Section 2.10 of the Draft EIR for a list of possible permits required.

### **Response to Comment PA2-10**

It is acknowledged that, depending on the method of biomass removal, a Public Agency, Public and Private Utility Right-of-Way Exemption, and/or a Timberland Conversion Permit may be required. All necessary permits will be obtained and filed with CAL FIRE as appropriate. See pages 3.2-4 and 3.2-8 in Section 3.2, *Agricultural and Forest Resources*, of the Draft EIR for a disclosure of impacts related to timberland conversion and discussion of these permit requirements.

### **Response to Comment PA2-11**

See the response to Comment PA2-10.

JAN-07-2008 MON 03:11 PM CALTRANS

FAX NO. 530 225 3020

P. 01

Letter PA3

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY ARNOLD SCHWARZENEGGER, Governor

DEPARTMENT OF TRANSPORTATION  
OFFICE OF COMMUNITY PLANNING  
1657 RIVERSIDE DRIVE  
P. O. BOX 496073  
REDDING, CA 96049-6073  
PHONE (530) 229-0517  
FAX (530) 225-3020  
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IGR/CEQA Review  
Sha-299-68.1  
Hatchet Ridge Wind  
Use Permit 06-016  
DEIR  
SCH# ~~200712207~~  
2007042078

January 7, 2008

Bill Walker, Senior Planner  
Shasta County  
Department of Resource Management  
Planning Division  
1855 Placer Street  
Redding, CA 96001

Dear Mr. Walker:

Thank you for the opportunity to review the Draft Environmental Impact Report (DEIR) prepared for the use permit submitted on behalf of Hatchet Ridge Wind LLC, for a 125 megawatt electrical generation facility, including 49 wind turbines. The project is located along Bunch Grass Lookout Road, north of Hatchet Mountain Summit in the Burney community area.

PA3-1

Access to the project site would be from State Route 299 via Bunch Grass Mountain Lookout Road. Ten (10) full-time employees are proposed when the facilities are completed. Up to 200 construction workers are anticipated during peak construction months. The existing highway connection is adequate for the proposed construction and use. The Traffic section includes a mitigation measure that a traffic control plan be prepared. This measure adequately addresses concerns related to construction traffic which is anticipated to be when the greatest number of vehicles would use the transportation facilities.

PA3-2

We have also reviewed the Cultural Resources section. Impact CUL-1 recognizes Hatchet Ridge-Bunchgrass Mountain as a historical resource. Mitigation Measure CUL-1 provides for coordination with the Pit River Tribe to perform a recordation of the historic property. The Tribe will have the right to determine the dissemination of the report. The information provided in Appendix D indicates the area immediately to the north of Hatchet Ridge and Bunchgrass Mountain as being the area of concern. Caltrans would like to work with the County and the Tribe in verifying that the recordation area does not include Highway 299. If the recordation includes Highway 299, the cultural impact concerns would need to be addressed for future highway projects. Therefore, it is of significant importance that Caltrans be aware of whether the State Highway is included in the recordation area.

PA3-3

"Caltrans improves mobility across California"

JAN-07-2008 MON 03:11 PM CALTRANS

FAX NO. 530 225 3020

P. 02

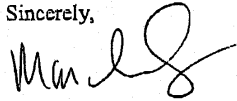
Sha-299-68.1  
Hatchet Ridge Wind  
Use Permit 06-016  
DEIR  
SCH# 2007122037  
January 7, 2008  
Page 2

As indicated in the draft initial study, the site is not located in an area currently eligible for scenic highway designation.

If you have any questions, please call me at (530) 225-3369. For consultation regarding the cultural concerns, please contact Ms. Sandra Rivera, Native American Liaison at (530) 229-0516 or Ms. Cassandra Hensher, Native American Coordinator/Associate Archaeologist at (530) 225-3332.

PA3-4

Sincerely,



MARCELINO GONZALEZ  
Local Development Review  
District 2

*"Caltrans improves mobility across California"*

## Letter PA3 California Department of Transportation, District 2

### Response to Comment PA3-1

The comment correctly identifies the location and key aspects of the proposed project, as described in Chapter 2 of the Draft EIR.

### Response to Comment PA3-2

State Route 299 is not included in the recordation area. Caltrans should note, however, that the recordation area does not dictate the geographic scope of potential impacts on historical resources such as Hatchet Ridge–Bunchgrass Mountain.

### Response to Comment PA3-3

It is noted that Caltrans concurs with the findings of the traffic analysis and approves the traffic control plan in the Draft EIR.

### Response to Comment PA3-4

Caltrans notes that the site is not located in an area currently eligible for scenic highway designation. Contact information for Caltrans is provided.

Letter PA4

SHASTA COUNTY FIRE DEPARTMENT

MEMORANDUM

DATE: January 21, 2008  
BW

TO: Russ Mull, Director  
Department of Resource Management

FROM: Mike Chuchel  
Shasta County Fire Warden

SUBJECT: 14 FIRE PREVENTION  
14.3 Fire Safety and Land Use Planning  
Use Permit 06-16 / Hatchet Ridge Wind LLC

PROJECT LOCATION: Hatchet Mountain  
PROJECT DESCRIPTION: Wind Energy Project

The above referenced project is located within the California Department of Forestry and Fire Protection / Shasta County Fire Department (CAL FIRE / SCFD) jurisdiction. CAL FIRE / SCFD has reviewed the proposal and submits the following requirements. (Note: The Resource Management Division of CAL FIRE will also be submitting comments.)

PA4-1

CONDITIONS

- Roadways and turnarounds shall be constructed in accordance with Section 6.12 of the Fire Safety Standards prior to the construction of any portion of the proposed facility.
- The facility shall be identified with a street address marker located adjacent to facility access road and Highway 299. The address numbers shall be a minimum of four inches in height, reflectorized, and shall contrast in color with the background. The address shall be clearly visible at all times.
- Roofing shall have a Class A rating as per the Shasta County Fire Safety Standards and the California Building Code.
- All buildings constructed on parcels one acre or larger in size shall be setback a minimum of 30 feet from all property lines and road easements in accordance with the Shasta County Fire Safety Standards, but a 100 foot setback is recommended in order to comply with the defensible space requirement.
- 7.9 Chimneys and flues shall be equipped with an approved spark arrestor as defined in Section 6.53 of the Fire Safety Standards.

PA4-2

- Fire protection water shall be in compliance with Section 6.43 of the Fire Safety Standards.
- The applicant shall dispose of any vegetation cleared for construction and/or land development purposes prior to the final inspection by the Shasta County Building Division and CAL FIRE / SCFD. Disposal shall be in accordance with Air Quality Management Regulations and State or local Fire Department Burning Permit Regulations.
- 7.16 Storage, use, and dispensing of flammable/combustible liquids shall be in accordance with the adopted edition of the California Fire Code. Plans shall be submitted to CAL FIRE / SCFD for review and approval prior to construction, storage, or use.
- 7.19 Portable fire extinguisher(s) shall be provided in accordance with the adopted edition of the California Fire Code.
- All welding and storage of cylinders shall be in accordance with the adopted edition of the California Fire Code. In addition to welding, other high risk activities such as cutting and grinding shall require welding curtains, and shall be restricted based on fire weather indices as determined by the CAL FIRE / SCFD.
- 7.23 Accumulations of waste paper, weeds, combustible waste material, waste petroleum products, tires, or rubbish of any type shall be prohibited.
- 7.24 Rags, cloth, or paper towels saturated with oil, solvent, or petroleum products shall be kept in a metal can with a tight fitting cover.
- 7.25 In accordance with Public Resources Code 4291 (a) the applicant shall provide "Defensible Space", by removing all flammable vegetation from around all buildings for a minimum of 100 feet or to the property line, whichever is closer.
- 7.26 All mobile and stationary equipment with non-turbocharged internal combustion engines shall be equipped with a properly functioning, approved spark arrestor.
- 7.27 Each vehicle shall be equipped with a portable fire extinguisher.
- 7.28 The CAL FIRE / SCFD shall sign the improvement plans for this project prior to submitting the plans to the Department of Public Works. Improvement plans will be reviewed for compliance with the Fire Safety Standards and other project specific conditions.
- 7.29 Advisory note: The project is located in an area designated as a "VERY HIGH" Fire Hazard Severity Zone under Section 4203 of the Public Resources Code of the State of California.

PA4-2  
cont.

- If applicant installs an automatic fire extinguishing system in the facility, plans shall be submitted for CAL FIRE / SCFD review as part of the building permit.
- All fires shall be reported even though they may have been extinguished.
- Applicant shall clear all trees and brush within 550 feet of all towers. This shall be maintained for the life of the facility.
- Applicant shall provide the necessary equipment and training to CAL FIRE / SCFD employees for extinguishment of facility specific fires, confined space rescue and high angle rescue.
- All electrical systems shall be designed and maintained in accordance with the California Public Utilities General Order 95 and corresponding underground standards.
- All electrical distribution and collection components shall be underground where possible. Where above ground installations are necessary, the latest standards for raptor and rodent protection should be incorporated.
- All electrical distribution and collection components shall be "exempt" and designed for high wind conditions.
- Applicant shall provide a "Risk Manager" to be available on site whenever construction activities are in progress. The Risk Manager shall have oversight authority and shall be the point of contact for the CAL FIRE / SCFD.

PA4-2  
cont.

Further questions or comments may be directed to County Fire Marshal Jim Diehl at (530) 225-2423.

Sincerely,

Mike Chuchel  
County Fire Warden

By 

Jim Diehl  
County Fire Marshal

cc: Hatchet Ridge Wind, LLC  
RES American Developments, Piscitello

## Letter PA4 Shasta County Fire Department

### Response to Comment PA4-1

This comment indicates that CAL FIRE and Shasta County Fire Department have jurisdiction over the project area.

### Response to Comment PA4-2

As a condition of project approval, the applicant will be required to comply with Shasta County Fire Department requirements, including specifications for roadways and turnarounds; address markers; defensible space and setbacks; spark arrestors or chimney flues; water supply for fire protection; disposal of cleared vegetation; storage, use, and dispensing of flammable/combustible liquids; availability of portable fire extinguishers; welding and other high-risk activities; disposal of waste, weeds, and combustible waste material; storage of oil, solvents, and rags; spark arrestors for equipment with internal combustion engines; review and approval of improvement plans and automatic fire extinguisher plans; reporting of fires; training; electrical systems; and designation of a “risk manager.”

*See also the response to Comment PA2-2 and Appendix D.*



# Utility Agency Comments

STATE OF CALIFORNIA

**Letter UT1**  
Arnold Schwarzenegger, Governor

**PUBLIC UTILITIES COMMISSION**

505 VAN NESS AVENUE  
SAN FRANCISCO, CA 94102-3298



January 28, 2008

Bill Walker, Senior Planner  
Shasta County Department of Resource Mangement  
1855 Placer Street, Suite 103  
Redding, California 96001

Dear Mr. Walker:

The Energy Division of the California Public Utilities Commission (CPUC) appreciates the opportunity to review the "Draft Environmental Impact Report for the Proposed Hatchet Ridge Wind Project" (State Clearinghouse No. 2007042078). Hatchet Ridge Wind, LLC, proposes to build and operate a wind turbine energy project that would produce 100 MW and would require the construction of 42 to 68 wind turbines. Also included in the project is the construction of a series of transmission lines from the wind turbines; a new substation; and an interconnection switching station (to be owned by PG&E.)

UT1-1

Under the California Environmental Quality Act (CEQA), any agency exercising discretionary authority over a portion of a project is regarded as a "responsible agency" for the purposes of the environmental review. Because the Hatchet Ridge project involves the construction of a switching station to be owned and operated by PG&E, the CPUC must make a discretionary decision to approve or deny a permit to construct a segment of this project. The CPUC, is therefore a responsible agency in this proceeding in accordance with CEQA.

UT1-2

The CPUC Energy Division has prepared comments relating to the Hatchet Ridge Wind Project DEIR. The comments are attached hereto as Attachment A.

UT1-3

Once again, thank you for the opportunity to review and comment on the DEIR for the Hatchet Wind Energy Project. Please do not hesitate to contact me at (415) 703-5484 if you have any questions regarding this matter.

Sincerely,

Jensen Uchida  
California Public Utilities Commission  
Regulatory Analyst

**Attachment A  
Comments of the California Public Utilities Commission  
Relating to the Hatchet Ridge Wind Energy Project**

**Executive Summary**

**Project Description, Overview.** This section states that the project may include up to 68 small wind turbines or as few as 44 large wind turbines. The section further states that because the applicant chose this as the preferred option, the DEIR evaluates the 44 wind turbine configuration. The section then states that the EIR evaluates the impacts of three possible configurations (i.e., 42, 44, or 68 turbines). The section also notes that the "impacts are not generally anticipated to vary substantially" between the three configurations.

UT1-4

**Comment:** The project description is extremely confusing. As a result, it is difficult to determine what project configuration was evaluated in the DEIR. The section states that the project may include the construction of 42, 44, or 68 turbines and that all three configurations were evaluated. However, the section then discloses that the 44 turbine configuration was preferred configuration evaluated in the DEIR. Indeed, the 44 turbine configuration appears to be the configuration depicted in visual simulations and proposed wind turbine layouts throughout the DEIR. However, because there are no equivalent analyses for the 42 and 68 turbine configurations, the assertion that the "impacts are not generally anticipated to vary substantially among the configurations" appears to be based on speculation, rather than data gathered during analysis. Without side-by-side comparisons of the three possible turbine configurations, it is impossible to determine the best/worst case scenario or the relative impacts of each option on the environment.

UT1-5

- To ensure full disclosure of the possible impacts of each option, the DEIR should evaluate the 42, 44, and 68 wind turbine configurations individually. The DEIR should include a grid that enables the reader to view the relative impacts of all three options on a single page.

**Chapter 2. Project Description**

**(1) Section 2.6.2 Electrical System.** This section discloses that the project would include, but not be limited to: (1) An Electrical Collector System; (2) A Substation (3) A five mile long 3 phase 230 kV circuit; and (4) An interconnection switching station.

**Comment:** The DEIR does not include visual simulations of the aforementioned system components from a street-level perspective. Nor does the DEIR include overhead maps identifying the locations of these components in relation to the project corridor. Aside from the noting that the project will include a switching station, the DEIR does not appear to evaluate the impacts of this facility any further.

UT1-6

- The DEIR should include visual simulations of these components from multiple viewpoints in the environment in which they will be situated. This recommendation applies to the substation; the switching station; the 230 kV circuit; the interconnection system; the operation and maintenance building; and any other aboveground facility;
- The DEIR should include a single overhead diagram of the project that illustrates the layout of all of the project components to be developed in connection with this project.
- The DEIR should include a full impact analysis of the switching facility.
- The DEIR should indicate the type of transmission towers the applicant intends to install to support the 230 kV circuit.

**(2) Section 2.6.3 Communication.** This section states that the project will include an underground fiber optic system to enable monitoring and control from "remote" locations.

**Comment:** The DEIR does not identify the location of this remote monitoring facility or whether the fiber optic intends to directly connect with this facility or interconnect into the Public Switched Telephone Network (PSTN).

- The DEIR should indicate whether the fiber optic system will be interconnected with the PSTN; and
- The DEIR should include a overhead map that indicates where trenching will take place and where conduit will be installed. The map should identify the facilities that will be directly connected to the fiber optic system.

UT1-7

**(3) Section 2.6.6 Permanent Meteorological Towers.** This section states that two permanent meteorological towers approximately 220 feet tall, would be constructed in the project area. In addition, up to five towers may be installed on a temporary basis.

**Comment:** Aside from noting the towers will be built, the DEIR does not appear to include the towers in any visual simulation, nor does it identify the locations of these towers on the project area maps.

- The DEIR should include the meteorological towers on all project simulations and maps.

UT1-8

### Chapter 3. Environmental Analysis

**(1) Section 3.3 Air Quality.** This section states that greenhouse gases (GHG) are thought to be responsible for the greenhouse effect or global warming.

**Comment:** Aside from noting that GHGs are a problem, the DEIR does not appear to estimate of forecast the amount of carbon dioxide that may be generated as a result of the project.

- The DEIR should estimate to level of carbon dioxide, methane, and nitrous oxide that may be generated as a result of the project.

UT1-9

## Letter UT1 California Public Utilities Commission

### Response to Comment UT1-1

The California Public Utilities Commission provides a summary of the project description as presented in Chapter 2 of the Draft EIR.

### Response to Comment UT1-2

The California Public Utilities Commission identifies its role as a responsible agency under CEQA due to its discretionary authority over PG&E activities including the proposed interconnection switching station.

### Response to Comment UT1-3

These comments preface the formal comments contained in Attachment A of the letter.

### Response to Comment UT1-4

As discussed in Chapter 2, *Project Description*, of the Draft EIR, a range of three turbine sizes and locations were considered to allow for fluctuating turbine market availability. However, because of the reasonable certainty of the project applicant that the configuration selected would comprise forty-four 2.3-MW turbines, and because the relative severity of impacts associated with each of the three options would be similar (i.e., none of the three options would entail a change in the significance finding for any resource area), the analysis focused on the 44-turbine configuration. The County maintains that the Draft EIR adequately analyzes the potential environmental impacts of the proposed project regardless of the turbine model ultimately selected. We concur that the language in the Executive Summary leaves room for misinterpretation; accordingly, that text has been revised for clarity the Final EIR (see Chapter 3).

### Response to Comment UT1-5

In response to the CPUC's concern regarding visual simulations of the electrical collection system, it should be noted that during the initial study and scoping process for the project, it was determined that simulations of the transmission facilities were not needed because these facilities would likely not be visible from the town of Burney or SR 299. As discussed in Chapter 2, *Project Description*, the electrical collector system would be installed underground, resulting in no long-term visual/aesthetic impact. The substation would be located adjacent to the existing telecommunication facilities on Hatchet Ridge and would not result in a significant visual impact.

In general terms, the electrical collection and transmission system associated with the project would not result in any significant visual impairment on Hatchet Mountain because of the considerations listed below.

- Some of the facilities would be undergrounded.
- The baseline conditions (including the existing overhead transmission line and telecommunication towers) constitute a preexisting visual impact of considerably greater prominence than that presented by the electrical collection and transmission facilities of the proposed project.
- The wind turbines comprising the bulk of the proposed project (evaluated in Section 3.1, *Aesthetics and Visual Resources*, of the Draft EIR) constitute a significant and unavoidable

impact. Because the electrical collection and transmission facilities are of far lesser stature, and because they are not visually discernable from as great a distance, there would be no change to the finding of a significant and unavoidable impact set forth in the Draft EIR.

It is acknowledged that the figure does not reflect the locations of either the electrical connector system or the interconnection switching station. Because the electrical connector system would be installed underground in association with new and existing access roads, there would be little utility in modifying the layout graphic (Figure 2-1 in the Draft EIR) to show that component. However, the figure has been revised to show the location of the interconnection switching station. Because the proposed location is at the southern end of the project area at the junction of two existing PG&E transmission lines in an area already subject to vegetation management practices, there would be no impact on sensitive plant species. Subsequent to issuance of the Draft EIR, PG&E commented that the size of the switching station was not 2 acres as indicated in Chapter 2, *Project Description*, but 4.6 acres. The increased size of the switching station would result in the loss of an additional 2.6 acres of habitat that could support special-status wildlife species. This effect is addressed in Impact BIO-3. The addition of 2.6 acres to the 73 acres already identified would not increase the level of significance of this impact; however, the text in Section 3.4 has been revised to reflect inclusion of the switching station.

The matter of poles planned for the overhead transmission lines is addressed on page 2-7 of the Draft EIR, which states that “single steel poles or double wood poles would likely support the overhead transmission lines.”

### Response to Comment UT1-6

According to the applicant, *“the communication cable including fiber optic for turbine monitoring and control would be located in the underground collector system trench back to the project substation. The overhead ground wire on the 230kV line would contain the fiber optic between the project substation and the POI. No new facilities or trenches will be needed to contain the communication fiber optic system.”*

The potential environmental impacts of the installation of the fiber optic system were reviewed in conjunction with the electrical collection system, and no significant environmental impacts were noted. The applicant has not provided information regarding the location of the remote monitoring facility, but it is assumed that it would be located offsite, likely at the applicant’s headquarters in Texas, and therefore presents no potential for environmental impacts at the project site.

The applicant’s response implies that the fiber network will be interconnected with the Public Switched Telephone Network (PTSN) at the point of interconnect (POI), which will be located at the switchyard location. Trenching for communication and electrical collector lines would be required in locations shown on Figure 2-1 of the Draft EIR.

### Response to Comment UT1-7

Because the locations of the meteorological towers have not been finalized, it was not possible to depict those locations on the project configuration graphic (Figure 2-1 in the Draft EIR), nor to include them in the visual simulations prepared for the proposed project. However, because there would be only two permanent towers, because all the towers would be considerably smaller than the wind turbines (220 feet contrasted with more than 400 feet) and would have no moving parts, and because the visual impact has already been determined to be significant and unavoidable, revising the figures would add no meaningful substance to the analysis.

### **Response to Comment UT1-8**

The Draft EIR addresses greenhouse gas emissions on page 3.3-3, and associated impacts are analyzed on page 3.3-14. The conclusion is that the project's construction-related emissions will have a less-than-significant impact on greenhouse gases. In addition, please see page 3 of the Applicant's Response letter, dated February 11, 2008. Although the Draft EIR did not include calculation of the greenhouse gas emissions associated with construction activities, due to the short-term nature of emissions from construction equipment, it was determined to be a less-than-significant impact.

Letter UT2



DEPARTMENT OF  
RESOURCE MANAGEMENT  
RECEIVED

3600 Meadow View Drive  
Redding, CA 96002

January 23, 2008

JAN 23 2008

PLANNING/BUILDING  
DIVISIONS

Shasta County  
Department of Resource Management  
Planning Division, Attn: Bill Walker  
1855 Placer Street, Suite 103  
Redding, California, 96001

RE: Draft EIR for Hatchet Ridge Wind Project

Dear Mr. Walker:

Thank you for the opportunity to review and comment on the Hatchet Ridge Wind Project Draft EIR. As you may know, PG&E will construct the interconnection between our existing tower lines and the proposed electric switching station and we will be the ultimate owner of the switching station.

UT2-1

PG&E's electric transmission projects are regulated by the California Public Utilities Commission (CPUC) through its General Order 131-D. The CPUC should be listed as a Responsible Agency in this EIR.

UT2-2

The Draft EIR incorrectly states that the size of the switching station will be about two acres. PG&E's need for the switching station area is roughly 450 feet by 450 feet or about 4.6 acres. I'm enclosing a drawing that shows our conceptual layout for the switching station and interconnecting 230kV loop transmission line.

UT2-3

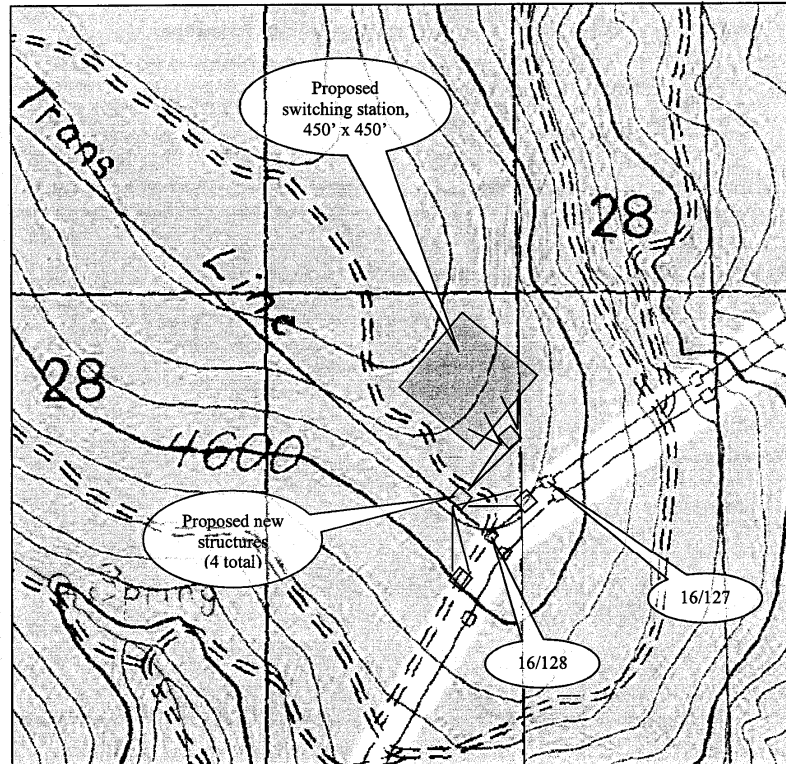
If you would like to discuss this further or need additional information, please call me at (530) 246-6419.

Sincerely,

Michael J. Momber  
Land Planner



HATCHET RIDGE WIND FARM  
PG&E's conceptual switching station siting



## Letter UT2 Pacific Gas and Electric Company

### Response to Comment UT2-1

PG&E acknowledges its role on the proposed project: to construct and own the interconnection switching station between the project and the existing transmission lines.

### Response to Comment UT2-2

Table 2-2 on page 2-13 of the Draft EIR lists the California Public Commission as a state agency responsible for issuing a permit for the proposed project under General Order 131(d).

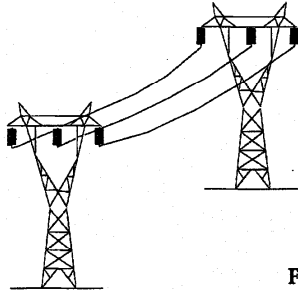
### Response to Comment UT2-3

See the response to Comment UT1-2.

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Letter UT3



**TRANSMISSION AGENCY OF NORTHERN CALIFORNIA**  
 P.O. Box 15129, Sacramento, CA 95851-0129 (916) 852-1673

**FAX TRANSMITTAL SHEET**

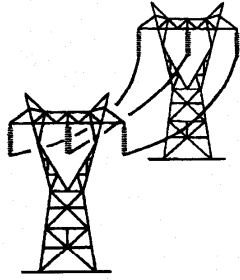
Date: January 28, 2008	Time:	W.O. # 127217.4.1
To:  Mr. Bill Walker		Fax #:  530/245-6468
Message		
From: James W. Beck		
Operator: Barbara Ford		
Number of pages (including cover sheet): 3		

Hard Copy WILL NOT follow via U.S. Mail.

If you have any problems or questions, please contact the operator noted above at (916) 852-1673. For transmittal of documents to TANC, please dial (916) 852-1073.

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002/003



# TRANSMISSION AGENCY OF NORTHERN CALIFORNIA

P.O. Box 15129, Sacramento, CA 95851-0129 (916) 852-1673

January 28, 2008

Via Facsimile

Mr. Bill Walker  
Shasta County Dept. of Resource Management  
1855 Placer Street, Suite 103  
Redding, CA 96001

Dear Mr. Walker:

We understand that Shasta County, as the Lead Agency under the California Environmental Quality Act (CEQA) will be evaluating and responding to comments, preparing and certifying the final EIR, making findings, and potentially approving the Hatchet Ridge Wind Project (Project).

UT3-1

The Transmission Agency of Northern California (TANC) is the largest owner and project manager of the California-Oregon Transmission Project (COTP). The COTP is one of three major 500-kV transmission lines that comprise the California-Oregon Interties (COI). These facilities are interconnected with a number of 230-kV lines owned by Pacific Gas & Electric (PG&E) and located in the proximity of the proposed Project.

UT3-2

Previous interconnection studies done by PG&E relative to projects located in the same area as the proposed Project and interconnected with PG&E 230-kV facilities in the area have indicated that the injection of power from these projects could have a detrimental impact on the amount of power that could be imported into California from the Pacific Northwest over the 500-kV grid. TANC has contacted the California Independent System Operator (CAISO) and requested a copy of the impact studies for the Project to determine if these studies for the Project had demonstrated any impacts on the 500-kV grid and, if so, how such were proposed to be mitigated. To date we have not received a response from the CAISO.

UT3-3

In the absence of specific studies quantifying the impacts or associated mitigation costs of the Project, on the existing 500-kV grid, please be aware that this and similar projects will likely increase the costs of rebuilding or re-conductoring existing 230-kV lines to maintain appropriate import levels and related performance objectives for potentially affected public facilities. The allocation of these costs is governed by the Owners

UT3-4

A Public Entity whose Members include:  
Alameda, Biggs, Gridley, Healdsburg, Lodi, Lompoc, Modesto Irrigation District,  
Palo Alto, Plumas-Sierra Rural Electric Cooperative, Redding, Roseville,  
Sacramento Municipal Utility District, Santa Clara, Turlock Irrigation District, Ukiah

01/28/2008 MON 16:06 FAX 9168521073

003/003

Mr. Bill Walker  
January 28, 2008  
Page Two

Coordinated Operating Agreement (COCA) among TANC, PG&E, and the Western Area Power Administration.

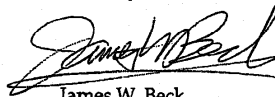
UT3-4  
cont.

Please be advised that TANC has no desire to stifle the development of renewable resources within California. In fact, TANC is actively working with the TANC Members to identify additions to the transmission grid which would facilitate the delivery of such resources to our members. The transmission plans that we are developing have not demonstrated any negative impacts on the existing grid and we believe that minimizing such impacts should be the goal of all parties in California pursuing the development of resources; both renewable and thermal.

UT3-5

Please contact Bryan Griess or Dave Larsen at (916) 852-1673 if you have any questions concerning the above.

Sincerely,



James W. Beck  
General Manager

## Letter UT3 Transmission Agency of Northern California

### Response to Comment UT3-1

This comment correctly identifies Shasta County's role as the lead CEQA agency and its associated duties and responsibilities.

### Response to Comment UT3-2

This comment provides information about the Transmission Agency of Northern California, its mission, and transmission lines in the project vicinity.

### Response to Comment UT3-3

This comment refers to previous interconnection studies and communication with the California Independent System Operator regarding impacts of the proposed project on the existing transmission system .

### Response to Comment UT3-4

Comment noted. Because PG&E is the owner and operator of the 230kV lines in the project vicinity, and will also be the owner of the proposed switch yard, any responsibility for reconductoring or upgrading transmission lines in the project area will be the sole responsibility of PG&E.

### Response to Comment UT3-5

The Transmission Agency of Northern California's favorable position on renewable resources, along with its own transmission plans, is noted.