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5 **BEFORE THE STATE OF WASHINGTON**  
6 **ENERGY FACILITY SITE EVALUATION COUNCIL**

7 In the Matter of Application No. 2003-01  
8 SAGEBRUSH POWER PARTNERS,  
9 LLC.  
10 KITTITAS VALLEY WIND POWER  
PROJECT

EXHIBIT 91 (KRB-T)  
COUNSEL FOR THE  
ENVIRONMENT'S PREFILED  
DIRECT TESTIMONY

11 **COUNSEL FOR THE ENVIRONMENT'S PREFILED DIRECT TESTIMONY**  
12 **WITNESS: KENNETH R. BEVIS**

13 **A. BACKGROUND**

14 Q. Please state your name and business address for the record.

15 A. Kenneth R. Bevis. The address is 1701 S. 24<sup>th</sup> Avenue, Yakima, WA 98902.

16 Q. Where are you employed?

17 A. Washington State Department of Fish and Wildlife (WDFW).

18 Q. What is your position at WDFW?

19 A. Area Habitat Biologist. I am the regional habitat specialist with emphasis on forests  
20 and shrub steppe issues. I also have knowledge and experience concerning avian  
21 species within the region.

22 Q. What are your duties and responsibilities as Area Habitat Biologist?

23 A. I work with public and private proponents of various projects to ensure that regulatory  
24 requirements are met in regard to fish and wildlife habitats, I also encourage project  
25 proponents to include elements beneficial to these habitats in their projects. I work  
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1 with individual landowners, state and federal agencies, and corporate landowners. I am  
2 a member of the Windpower Work group within WDFW.

3 Q. Please identify what has been marked as exhibit KB-91?

4 A. Exhibit KB-91 is a copy of my resume which includes my educational background and  
5 professional employment experiences.

6 Q. Are you familiar with Sagebrush Power Partners LLC's application to build the  
7 Kittitas Valley Wind Power Project?

8 A. Yes. I have been in communication with WDFW personnel and representatives of  
9 Sagebrush Power Partners LLC regarding the project over the past two years. I have  
10 visited the project site for the proposed wind project. I have also reviewed documents  
11 regarding the proposed wind power project.

12 Q. What documents have you reviewed?

13 A. I have reviewed the Application for Site Certification (ASC), the ASC Clarification  
14 Information, the Draft Environmental Impact Statement (DEIS), and the prefiled  
15 testimony of Wally Erickson and Peggy O'Neil. I have also reviewed Attachment 1 of  
16 WDFW's comments on the DEIS submitted by Ted Clausung on January 20, 2004. I  
17 adopt these comments as part of my testimony.

18 Q. Is the information contained in these sections and exhibits within your area of  
19 expertise?

20 A. Yes.

21 **B. BIRDS**

22 Q. Do you have any concerns regarding the protocols used by WEST Inc. in its study of  
23 the projected avian impacts?

24 A. The protocols generally follow accepted scientific guidelines for avian abundance  
25 work, particularly the point count data. However, I have some concern regarding the  
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1 duration and intensity of the surveys. In particular, how the short duration of the study  
2 may affect the definitiveness of the abundance information.

3 Q. Do you have any reason to believe the estimated mortality rates outlined in the  
4 Application Materials are incorrect?

5 A. Mortality rates derived from turbine kill searches at other projects may not be entirely  
6 applicable to this location. Unfortunately, there is no other way to derive this  
7 information. I am concerned that the mortality rates may be derived from lumped data,  
8 where projects in various types of habitats are used to estimate effects on this site.

9 Q. Are you familiar with the flight corridors birds use in Washington?

10 A. Yes.

11 Q. Please explain for us what a flight corridor is?

12 A. Flight corridors are areas where concentrations of migratory or resident birds regularly  
13 travel. These might be places of movement from one locale to another, or places where  
14 resources such as food, perches, or air currents regularly direct these animals.

15 Q. Do any of the known corridors pass through the KVVWPP?

16 A. Ridgelines in the Cascades foothills are regularly utilized as flight corridors by many  
17 species, particularly raptors, due to the advantageous patterns of the air currents. The  
18 riparian habitat corridors along Swauk Creek, Dry Creek and the Yakima River are  
19 very likely used by migratory passerines such as warblers, for migration and summer  
20 breeding range.

21 C. **RAPTORS**

22 Q. Studies conducted for the applicant indicate the approximate number of raptor  
23 deaths that are projected to occur if the project is built. Please describe for us what  
24 qualifies as a raptor and the importance of raptors in the ecosystem.

25 A. Raptors include hawks, eagles, and owls. They play a key ecological role as top tier  
26 predators, consuming rodents and other smaller species; thus keeping populations in

1 check and driving evolutionary selection for fecundity and behavior of these prey  
2 species. Raptors are considered a key indicator of ecosystem health. Occupying the top  
3 of the food chain, effects of toxins are often noted in raptor populations.

4 Q. Are you aware of any raptor species present in the KVVWPP area other than those listed  
5 in the material you reviewed?

6 A. No

7 Q. Assuming the raptor mortality estimates included in the Applicant's materials are  
8 accurate, do you have any concerns about the impact on the overall population numbers  
9 of the affected species?

10 A. Overall population numbers of most raptor species are poorly known; therefore, the  
11 population impact of such losses is difficult to assess. Breeding densities can give a  
12 general idea, but systematic surveys of abundances do not occur for most species. For  
13 example, in this region WDFW only monitors nesting for golden eagles and peregrine  
14 falcons on a rotating year schedule. No other raptor abundance work is sponsored by  
15 WDFW here. General numbers, derived from winter Audubon counts, and localized  
16 studies can give some clues to overall abundance, but these numbers are inexact. Of  
17 course, impacts to raptor species of especially low abundance or rarity would be of  
18 particular concern. The abundance of nesting redtails in the Kittitas valley could be  
19 markedly reduced.

20 Q. Assuming the raptor mortality estimates included in the Applicant's material are  
21 accurate, do you have any concerns about the impact on the ecological community in  
22 the Kittitas Valley region?

23 A. Raptors fill a particularly important ecological role. Wintering populations of raptors  
24 could be significantly impacted if particular weather patterns pushed large numbers of  
25 raptors into the project area. Loss of these birds would damage the food web by  
26 removing these top tier species.

1 **D. ENDANGERED SPECIES**

2 Q. Are there any endangered avian species that use the KVVWPP area?

3 A. Bald eagle

4 Q. Is the Bald Eagle scheduled to be de-listed from the Endangered Species Act (ESA)?

5 A. There is discussion that the Bald Eagle may soon be de-listed.

6 Q. Please tell us about the Bald Eagle Protection Act.

7 A. It protects bald eagles from harm and harassment, and provides for bald eagle  
8 management plans on nest sites.

9 Q. Do you have any concerns regarding the Applicant's information regarding the Bald  
10 Eagle?

11 A. The bald eagles in the Kittitas valley area are wintering, and moving around based upon  
12 the presence of food resources, largely associated with cattle and calving. The  
13 documented flight paths will change as livestock practices change on the project area,  
14 and therefore are largely subject to local conditions. I believe the bald eagle survey  
15 period was too short to provide sufficient information regarding likely bald eagle  
16 movement through the project area.

17 **E. PASSERINES**

18 Q. What is a passerine?

19 These are members of the largest group of birds. They often have elaborate vocal  
20 capability, and highly varied markings and habits. Sparrows, warblers, thrushes and  
21 shrikes are all examples of passerines.

22 Q. Do you have any concerns regarding the projected mortality of passerines at the  
23 KVVWPP on overall population numbers for the various affected species?

24 A. Passerine mortality is of great concern on the proposed project. Much is unknown  
25 about the local habits of these species. Most of the migratory habits and corridors for  
26 these species are unidentified. Breeding densities are speculative based upon habitat

1 types and limited breeding bird surveys done in the past. Population trends are  
2 downward for many of the passerine species (Partners in Flight) and impacts to overall  
3 populations from additional loss is largely unknown. As with raptors, losses of the  
4 rarest and declining species, particularly neotropical migrants, would be of the greatest  
5 concern. The unknowns make this question difficult to draw definitive conclusions.

6 **F. BATS**

7 Q. Assuming the Applicant's projected mortality rate for bats is accurate, do you have any  
8 concerns about the impact on the overall population of the affected species?

9 A. Yes. Bat populations are largely unknown. Any stated affect on populations, which  
10 are unknown, is purely conjectural. Habitat loss of key attributes for bats, for example  
11 large diameter dead trees, is widespread. Habitat loss trends would suggest that  
12 associated populations are in decline. Additional mortality is of course subject to  
13 concern.

14 Q. Assuming the Applicant's projected mortality rate for bats is accurate, do you have any  
15 concerns about the impact on the regional ecological community?

16 A. Yes. Bats, like raptors, occupy a predatory role in ecosystems, focusing on insects.  
17 Insects can be a vector for disease. Bats are a major predator of mosquitoes, that carry  
18 West Nile virus, which has had a major impact on avian populations in other parts of  
19 the United States. A West Nile outbreak could cause significant decline in depressed  
20 populations of bird species of special concern, such as sage grouse.

21 **G. Mitigation Measures**

22 Q. Are there any mitigations measures not being suggested by the Applicant which you  
23 believe should be considered?

24 A. I believe if particular turbines are found to cause excessive avian mortality, they should  
25 be decommissioned. The applicant should also consider avoiding placement of towers  
26 along ridge tops, especially in areas of known bird concentrations.

1 **H. BIG GAME**

2 Q. What big game wildlife primarily populate the project area of the KVVWPP?

3 A. Mule deer and elk. Particularly mule deer.

4 Q. Do you have any concerns regarding the impact of construction activities on the big  
5 game population in the area?

6 A. Minor concern, only if displaced animals cause problems on adjacent private lands  
7 requiring damage control.

8 Q. Do you have any concerns regarding the impact of the project, if constructed, on the big  
9 game populations in the area?

10 A. Minor. If big game is found to avoid the project, winter range capacity would be  
11 reduced. If the wind plants become refuge areas, with no hunting allowed, it could  
12 actually increase winter carrying capacity in this area.

13 **I. CUMULATIVE IMPACTS**

14 Q. Are you involved in the review of any other wind power projects in Kittitas  
15 County?

16 A. Yes. I have also looked at information regarding the Wild Horse Wind Power  
17 Project and the Desert Claim Wind Power Project.

18 Q. Assuming the avian mortality estimates of the three projects are accurate, do you have  
19 any concerns?

20 A. Yes. The same concerns as above would apply.

21 Q. Do you have any concerns about the cumulative impact of the three projects on big  
22 game wildlife in the Kittitas Valley region?

23 A. See comments above.  
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