

Appendix I

Comment Forms and Letters Received

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**South Dakota PrairieWinds Project
Environmental Impact Statement (EIS)**

Thank you for your interest in the proposed South Dakota PrairieWinds Project (Project). Please complete the appropriate sections of this form to be included on the Project mailing list and/or to provide comments. Written comments can be submitted at the Scoping Meeting, faxed to (720) 962-7263, mailed to the address on the back of this form or sent to the **Project Email Address: sdprairiewinds@wapa.gov**. Comments on the project scope and alternatives should be received by **May 15, 2009**, to be considered in defining the scope for the Draft EIS. For more information about the Project, please go to the **Project Website: <http://www.wapa.gov/sdprairiewinds.htm>**.

- I would like to be kept informed of the ongoing progress of this Project. Please include my name on the mailing list.
- I prefer electronic/email communication.
- I prefer paper mailings.

Please Print Contact Info Below

<u>Name:</u> Gail Annett	<u>Organization:</u> Wessington Springs Area Development Corp.
<u>E-mail address:</u>	<u>Daytime Phone No. (optional):</u>
<u>Street Address:</u>	<u>City / State / Zip Code:</u>

Please indicate any questions, comments or concerns you have about the Project in the comment section below (continue on separate sheet if necessary).

Thank you for coming with appropriate SMEs.
I'm most concerned about the environmental process. Can it be more clearly specified + expedited? Our national energy policies + national security in general, are impacted by excessive oil import. Wind + other renewables are time sensitive

Thank you for your time and interest in the South Dakota PrairieWinds Project.

From: <Debra.Ascher@state.sd.us>
To: <reilly@wapa.gov>
CC: <Tom.Kirschenmann@state.sd.us>
Date: 5/12/2009 3:02 PM
Subject: Prairie Winds project
Attachments: Prairie Winds Scoping Letter May 2009.doc; FromKempemaToBerg17Dec2007.pdf; GFPReviewPrairieWinds_2008-12-30.pdf

Liana,

I have attached a letter and the enclosures to this email for the EIS from the South Dakota Department of Game, Fish, and Parks. The original letter will follow in regular US Mail.

<<Prairie Winds Scoping Letter May 2009.doc>>
<<FromKempemaToBerg17Dec2007.pdf>>
<<GFPReviewPrairieWinds_2008-12-30.pdf>>

Debra Ascher, Executive Secretary
SD Department of Game, Fish, and Parks
2nd Floor Foss Building
523 East Capitol Ave
Pierre, SD 57501
Phone 605.773.3718
debra.ascher@state.sd.us



DEPARTMENT OF GAME, FISH, AND PARKS
Foss Building
523 East Capitol
Pierre, South Dakota 57501-3182

May 12, 2009

Ms. Liana Reilly
Document Manager
Western Power Administration
Cooperate Services Office – A7400
P.O. Box 281213
Lakewood, CO 80228-8213

Dear Ms. Reilly,

This is in response to your letter dated April 9, 2009 regarding notice of Prairie Winds SD1 wind power project, its associated Environmental Impact Statement (EIS), and invitations to participate in an interagency meeting, and to serve as a cooperating agency in the development in the EIS. The location of this project would either be near Wessington Springs or Winner, South Dakota.

We recognize and appreciate your efforts in keeping our Department informed on the development of this proposed project. As you may be aware, our Department has provided information and comments on both of the proposed sites/potential wind power projects. Correspondence has been exchanged between various staff in our Department either with Basin Electric, Terracon Consultants, Inc., or Western Area Power Administration via letters, emails, and phone calls regarding Natural Heritage Program data, information on private lands enrolled in conservation programs, environmental review comments, and suggestions to improved proposed pre-construction wildlife survey protocol.

In brief, the State of South Dakota supports the responsible development of alternative sources of energy and appreciates the consideration of direct and indirect impacts of wind power development on wildlife. These impacts include mortality from turbine strikes, habitat alteration, and behavior modification from improperly sited wind power projects.

Potential impacts to the following should be addressed in the EIS:

- High quality and/or contiguous grassland habitats
- Areas with high concentrations of wetlands

- Wildlife species including the American Burying beetle, Whooping Crane, Trumpeter Swan, area-sensitive grassland bird species, and migratory tree-roosting bats

The cumulative affects of existing wind power projects, the proposed wind power project and potential future development and associated infrastructure (transmission lines, roads, etc.) also should be addressed.

Please refer to the letters from our Department dated December 14, 2007 to James Berg of Basin Electric Power Cooperative and December 30, 2008 to Kim Austin of Terracon Consultants, Inc. for more detailed information including issues that our Department considers important and ways to address potential impacts. These letters and the associated Natural Heritage Program data also provide the information on unique and/or special resources or areas in the proposed project areas.

Please keep our Department informed of project developments and on your contact list during the NEPA process. Please provide this information to Tom Kirschenmann, Chief of Terrestrial Resources at 523 East Capitol, Pierre, SD, 57501.

Sincerely,

Jeffrey R. Vonk,
Department Secretary

Enclosures (2)

cc: Tony Leif, Division of Wildlife Director
Tom Kirschenmann, Chief of Terrestrial Resources, DOW
Silka Kempema, Wildlife Biologist, DOW



DEPARTMENT OF GAME, FISH AND PARKS

Foss Building
523 East Capitol
Pierre, South Dakota 57501-3182

December 14, 2007

James Berg
Water Quality/Waste Management Coordinator
Basin Electric Power Cooperative
1717 East Interstate Ave
Bismarck, ND 58503-0564

RE: Environmental review of two potential
wind power projects near the cities of
Reliance and Crow Lake, SD

Dear Mr. Berg:

The following comments are in response to your letter dated 16 November 2007 requesting environmental review of two potential wind power projects near the cities of Reliance and Crow Lake, SD. This letter addresses environmental concerns regarding sensitive wildlife species and habitats, and other state wildlife interests such as migratory birds, bats, grassland and wetland resources, and environmental properties.

Doug Backlund, our Natural Heritage Database (NHD) manager, has provided location information on rare and protected species known to be within the proposed project areas and included in our NHD. Please note that absence of a species from the NHD does not preclude its presence in either of the proposed project areas. Many areas in South Dakota have not been surveyed for native wildlife species. An invoice for the database search is enclosed. If you have further questions regarding the NHD search, please contact Doug Backlund at (605) 773-4345. If you have specific questions about the plant records, please contact our botanist, Dave Ode, at (605) 773-4227.

The proposed siting and operation of a wind power project has the potential to directly and indirectly impact area wildlife by killing bats and birds (wind turbine and power line strikes) and altering wildlife habitat (fragmentation, degradation, and conversion) and behavior (breeding and daily and seasonal movements). While we applaud efforts to provide alternative energy sources, we offer the following information on grassland and wetland habitats and associated species. We also provide additional suggestions on avoiding impacts to these wildlife resources. If impacts are unavoidable, we recommend mitigation to avoid or lessen direct and indirect impacts.

Ecoregions

The Reliance Proposed Project Area is located within the River Breaks and the Subhumid Pierre Shale Plains ecoregions (Bryce et al. 1998). The River Breaks ecoregion is characterized by steep and dissected topography especially along tributaries to the Missouri River. Topographical variation has precluded cultivation, much of the area remains as native rangeland. Also interspersed with wooded draws, this ecoregion is a haven for wildlife. The Plains ecoregion is characterized by rolling plains with occasional topographical relief from buttes and badlands. The land is cultivated in the lower lying areas to small grains and alfalfa; steep and broken areas are native rangelands. The region is susceptible to soil erosion.

The Crow Lake Proposed Project Area is located primarily within the Southern Missouri Coteau Slope (Bryce et al. 1998). The level to rolling uplands characteristic of this region are converted to agricultural crops (small grains and row crops). The simple stream drainages are often grazed.

Grasslands

Both of the proposed project areas are located within the mixed-grass prairie zone. Native grasslands within this zone are decreasing at an alarming rate. Seventy percent of the native mixed-grass prairie has been lost in South Dakota (Samson et al. 1998). Other grassland types such as native rangeland (grazed grasslands with native plant spp.), pasture (grazed grasslands with non-native plant spp.) and Conservation Reserve Program lands (formerly tilled lands planted to vegetative cover for erosion control and wildlife habitat) serve as wildlife habitat (Haufler 2005). Fragmentation resulting from woody encroachment, road construction, and conversion of surrounding habitat has resulted in remaining grassland types existing as smaller disjunct patches. These patches often provide less suitable habitat for many native species of grassland wildlife.

The Reliance Proposed Project Area contains large areas of contiguous grasslands, especially in the northern and western portions. Although the Southern Missouri Coteau Slope ecoregion is described as extensively cultivated, the Crow Lake Proposed Project Area is primarily native prairie and contiguous grassland habitat still exist within the center of this project area. Efforts should be made to avoid activities in contiguous grassland areas that may fragment these habitat types.

Grassland birds

Specifically, placement of turbines in the proposed project areas may alter habitat and behavior of grassland birds. Grassland birds have shown the most consistent and long term declines of any other group of bird species in North America (Peterjohn and Sauer 1999). Several grassland bird species are known to be area sensitive (Johnson, 2001, Johnson and Igl 2001). Area-sensitive species known to occur in the Crow Lake proposed project area include Northern harrier, upland sandpiper, sedge wren, field sparrow, vesper sparrow, savannah sparrow, grasshopper sparrow, dickcissel, bobolink, and Western meadowlark. Similar grassland bird species may be expected to be found in the Reliance proposed project area.

The proposed project areas are in the current geographic distribution of the greater prairie chicken. This species also is known to be area-sensitive, requiring comparatively large tracts of open, contiguous grassland. The lesser prairie chicken, a similar species found more commonly in the southern Great Plains, avoids nesting within 400 m of transmission lines or improved roads. This suggests that placement of turbines and associated infrastructure (roads and

transmission lines) also may negatively affect greater prairie chickens. A second prairie grouse species, the sharp-tailed grouse, also is a known breeder in both proposed project areas.

Properly timed, species-appropriate surveys for prairie grouse (greater prairie chickens and sharp-tailed grouse) and other grassland bird species should be conducted pre-construction. Breeding ground surveys for prairie grouse species should be conducted in the spring (late March through April). Surveys for other breeding grassland birds are best conducted in June, although mid-May through early July is acceptable.

Upland birds are known to be susceptible to direct strikes with wind turbines. Based on a study conducted in the Buffalo Ridge area of Minnesota (Higgins et al. 2007), upland bird species with known wind turbine strike mortality and known to occur in the Crow Lake proposed project area include the Bell's vireo, sedge wren, grasshopper sparrow, and western meadowlark. Burrowing owls have been documented to occur near the Crow Lake proposed project area. This species is most often found within black-tailed prairie dog colonies in South Dakota. This owl is also known to suffer from direct strikes with wind turbines in other areas of the country (Smallwood et al. 2007). Similar bird species may also be found in the Reliance Proposed Project Area.

Wetlands

The Crow Lake proposed project area is located within the Prairie Pothole region. This glaciated region, characterized by high densities of wetland basins of various depths and sizes, extends from Iowa into Minnesota, the Dakotas, Montana, and parts of Canada. It is the major waterfowl production area in North America. Wetland losses in the Prairie Pothole Region are staggering and range from 99% in Iowa to 35% in South Dakota. The number of wetland basin densities (# of basins/10 mi²) in the proposed project area is 90-100 basins/10 miles² (Johnson and Higgins 1997). This is some of the lower basins density levels in the Prairie Pothole region. Although wetland densities are comparatively lower than elsewhere in the in the Prairie Pothole Region, care must be taken to avoid impacts to the wetland resources in this glaciated region. Although the Reliance Proposed Project Area is not within the Prairie Pothole region, proper there are still numerous wetlands and lakes in the area. Micro-siting of turbines within the proposed project area should avoid placement of turbines in areas with conglomerations or wetlands and lakes.

Wetland birds

Waterbird species such as pied-billed, eared, and Western grebes, great egret, great blue heron, Franklin's gull, black tern, marbled godwit, and Wilson's phalarope are known to occur near the Crow Lake proposed project area. The black tern, marbled godwit and Wilson's phalarope are species of particular concern in South Dakota; they are recognized as Species of Greatest Conservation Need (South Dakota Department of Game, Fish and Parks 2006) and are priority level I species in the South Dakota All-Bird Conservation Plan (Bakker 2005).

Wetland birds also are susceptible to direct strikes with wind turbines. Based on a study conducted in the Buffalo Ridge area of Minnesota (Higgins et al 2007), species with known wind turbine strike mortality and are known to occur in the Crow Lake proposed project area include ruddy duck, American coot, and Franklin's gull. Similar species should be expected to occur at the Reliance site. Proper siting of turbines, outside of daily and seasonal movement and migration routes of waterbirds and waterfowl, and the protection of remaining wetlands within the proposed project area is crucial to reduce the impact to wetland dependent species.

Bats

Construction of a wind power plant may affect daily and seasonal bat movements between breeding, wintering/hibernation, and foraging areas. Thirteen species of bats are currently known to be found in South Dakota and are considered either summer or year-round residents or migratory (Table 1).

Table 1. South Dakota Bats

Common Name	Scientific Name	State Residency
Big Brown Bat	<i>Eptesicus fuscus</i>	Year-round resident
Fringed Myotis	<i>Myotis thysanodes</i>	Year-round resident
Little Brown Myotis	<i>Myotis lucifugus</i>	Year-round resident
Long-eared Myotis	<i>Myotis evotis</i>	Year-round resident
Long-legged Myotis	<i>Myotis volans</i>	Year-round resident
Northern Myotis	<i>Myotis septentrionalis</i>	Year-round resident
Townsend's Big-eared Bat	<i>Corynorhinus townsendii</i>	Year-round resident
Western Small-footed Myotis	<i>Myotis ciliolabrum</i>	Year-round resident
Hoary Bat	<i>Lasiurus cinereus</i>	Summer resident
Red Bat	<i>Lasiurus borealis</i>	Summer resident
Silver-haired Bat	<i>Lasionycteris noctivagans</i>	Summer resident
Evening Bat	<i>Nycticeius humeralis</i>	Migratory
Eastern pipistrell	<i>Pipistrellus subflavus</i>	unclassified

There has been limited research conducted on bats in South Dakota. However, Swier (2006) and Bales (2007) reported six species of bats occurring near the proposed project areas: 1) big brown bat, 2) silver-haired bat 3) hoary bat, 4) red bat, 5) little brown myotis, and 6) Northern myotis.

Of these six species, the silver-haired bat and Northern myotis are considered rare and monitored by the Natural Heritage Program (NHP). Silver-haired bats have a probable distribution throughout the state of South Dakota. They are classified as a tree bat requiring trees for roosting and maternity sites. In eastern South Dakota, they are found roosting in wooded areas along water courses. In treeless areas, they use fence post piles, boards, and bricks for roosts. Foraging areas include corridors found along roads and waterways. The earliest spring migration record for this species is late-April in Brookings County. Fall migration begins in late-August to early-September. In the Black Hills, most silver-haired bats are captured during the summer (June to September). Mating takes place during late summer and two pups are usually born in June. Structural tree-age diversity in roosting habitats is required for this species.

The Northern myotis has a probable distribution throughout the state. In central and eastern South Dakota it is found most often in riparian forest along rivers and streams. Summer roosts in this part of the state are found in trees (cavities or under loose bark) or buildings. Caves, quarries, and old mines serve as winter hibernation sites. This species does not forage over water. Instead the Northern myotis often forages over forested hillsides and ridges, just under the forest canopy. Breeding occurs in autumn; one pup is born the following July. Threats to this species include lost of hibernation sites, nursery trees, and foraging habitat and

disturbance at hibernation and nursery sites (under loose tree bark or under house shingles).

Based on a study conducted in the Buffalo Ridge area of Minnesota (Higgins et al 2007) the big brown bat, silver-haired bat, hoary bat, and red bat species currently known to be within the proposed project area are also known to be directly killed due to strikes with wind turbines. Because of limited, project-specific data, we would suggest pre-construction surveys of the area for potential bat habitat and species. Surveys for species should be conducted for at least one full year before construction.

Recently, South Dakota Department of Game, Fish and Parks (SDGFP) in cooperation with the South Dakota Bat Working Group (SDBWG), developed the *South Dakota Bat Management Plan* specific to bats and their habitats in South Dakota (<http://www.sdgifp.info/Wildlife/Diversity/batmanagementplan71304.pdf>). Please review this document for pertinent information. Again, because bats reside and migrate through South Dakota, it is important to evaluate the proposed project area for roosting, feeding, migration and/or stopover habitat and to survey these areas for bats.

Protected Species

Bald eagles are known to nest in the Reliance Proposed Project Area. Bald eagles are a state threatened species and are protected federally under the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act. In addition, migrant bald eagles are possible in the spring and fall. This proposed project location is within the primary migration route of the 'Aransas National Wildlife Refuge to Wood Buffalo National Park' population of whooping cranes. This species is protected as endangered under both state and federal laws. Placement of turbines in this area could very likely increase the chances of wind turbine and power line strikes and electrocutions. We are exceptionally concerned about the direct impacts a potential wind power project may have on this population of whooping cranes.

Crow Lake Proposed Project Area – No records of nesting bald eagle occur in this proposed project area. However, bald eagles do nest in Brule County and new nests are appearing in the state each year. Although no records of the endangered whooping crane occur in this proposed project area, several sightings have occurred in Brule and Aurora Counties.

New and existing power lines associated with the proposed project should be buried, marked, or retrofitted to reduce strikes and electrocutions of whooping cranes and other bird species. The Avian Protection Power line Interaction Committee (APLIC) has developed two documents that may be of use: 1) *Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006* and 2) *Mitigating Bird Collisions with Power lines*. Both of these documents are available from the Edison Institute (<http://www.aplic.org/>, under 'products and services').

Landscape considerations

Placement of a wind power project should take into account larger landscape-level (e.g. surrounding land uses) and cumulative impacts (e.g. existing and potential wind power projects) as well as project associated infrastructure (i.e. transmission lines and roads).

Public lands

Part of the Reliance Proposed Project Area lies within the Lower Brule Sioux Tribe Indian Reservation. I would recommend you contact Ben Janis, Director of Lower Brule Department of Wildlife, Fish, and Recreation (phone: 605-473-5666, fax: 605-473-1120) for Tribal input

regarding this proposed wind power project.

Two SDGFP Game Production Areas (GPA) are located within and adjacent to the Crow Lake Proposed Project Area (Crow Lake GPA and Horseshoe Lake GPA, respectively). Placement of public lands is often done in areas with existing and potential wildlife habitat. Managing these lands for wildlife is conducted in the public interest. These lands may be affected by the placement of a wind power project in the vicinity. The Wildlife Division of SDGFP has an online database of public land locations within South Dakota. You can access this resource via the web at <http://www.sdgfp.info/Wildlife/PublicLands/PubLand.htm>.

Migrating wildlife

The resulting mosaic of grassland and wetland basins and linear wetland corridors makes these proposed project areas an important migration route for birds (e.g., neotropical migrants, shorebirds, and waterfowl). The Central Flyway, an important pathway for migratory ducks, geese, swans, and cranes runs through the midsection of the country, including South Dakota. Species using this flyway during migration, and particularly during inclement weather when birds alter their flight altitude, may suffer increased mortality due to direct strikes with wind turbines and associated power lines. Appropriately timed, pre-construction surveys for migratory bird species should be conducted. Spring migration can begin as early as late-March to early-April and tapering off in mid-May, depending on the species. Fall migration can begin as early as mid-July and extend through October/November depending on species and weather conditions.

Powerlines

Construction of powerlines is often associated with a proposed wind power project. Power line strikes are a known cause of mortality to birds (Erickson et al. 2005). Waterfowl (ducks, geese, swans), cranes, raptors, and passerines are species most susceptible to powerline collisions. Power line strikes are one of the greatest threats to the endangered whooping crane. The Avian Protection Power line Interaction Committee has developed two documents that may be of use to reduce powerline strikes and mortality: 1) *Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006* and 2) *Mitigating Bird Collisions with Power lines*. Both of these documents are available from the Edison Institute (<http://www.aplic.org/>, under 'products and services'). The new and existing power lines associated with the proposed project should be buried, marked, or retrofitted to reduce strikes and electrocutions of birds.

Non-native/invasive plant species

During the construction and maintenance phase of a wind power project new roads are constructed and existing roads often experience increased traffic. This increased amount of disturbance allows for the introduction and establishment of non-native/invasive plant species. Resulting control of those species through pesticides and herbicides may also impact habitats of rare wildlife species. Non-native plant species are one of the major threats to threatened and endangered wildlife species. Improved access (via roads) can also increase human disturbance to wildlife in the area.

Monitoring and Research

If monitoring plans involve live trapping or collection of wildlife species, you must first obtain a collection permit from our agency. Also, we kindly request that if you or your

associates observe any of the animal or plant species monitored by the NHP, please contact myself or any of our NHP staff (http://www.sdgifp.info/Wildlife/Diversity/staff_contact.htm). A list of species monitored by the NHP can be found at: <http://www.sdgifp.info/Wildlife/Diversity/RareAnimal.htm> and <http://www.sdgifp.info/Wildlife/Diversity/rareplant2002.htm>.

Northern Prairie Wildlife Research Center, a part of the US Geological Survey, is currently investigating the influence of wind generators on breeding grassland bird density and species composition in the Dakotas. The preliminary results of this study may be of interest to you. Please contact Jill Shaffer (701-253-5547 or jshaffer@usgs.gov) for more information.

Siting Guidelines

In coordination with the SDBWG, the SDGFP has developed *Siting Guidelines for Wind Power Projects in South Dakota*. This document addresses many of the general concerns involved with siting wind power projects in South Dakota and may be found at on the World Wide Web (<http://www.sdgifp.info/Wildlife/Diversity/windpower.htm>). I have enclosed a copy for your convenience.

Summary

As outlined above, our agency has concerns regarding direct and indirect impacts to wildlife and habitats in association with the siting of the proposed wind power projects. During the project planning state, appropriately timed and species appropriate wildlife surveys should be conducted for a minimum of one year, to determine bird and bat use of the project areas. Based upon results of these baseline surveys, project construction should be modified, continued, or cancelled. If the project is continued and because of the potential impacts placement of the proposed wind power project would have on wildlife and habitats in the region, we recommend the placement of turbines in areas currently disturbed (e.g. cultivated areas) and the use of existing infrastructure (roads and transmission lines) as much as possible. In addition, monitoring should be conducted for a minimum of two years post-construction to determine if and how many bird and bat strikes are caused by this project, if habitats have been significantly altered, and if wildlife habitats in the project area and surrounding areas have been impacted. Any mitigation should be carefully planned, funded, and followed.

The SDGFP appreciates the opportunity to provide comments on the proposed wind power projects. As a follow-up to this early screening and information gathering portion of your project planning, I would be willing to conduct a site visit with you or a representative of Basin Electric or Tetra Tech to further discuss these potential wind power projects. If you have any questions on the above comments, please feel free to contact me at 605-773-2742 or Silka.Kempema@state.sd.us.

Regards,



Silka L. F. Kempema
Terrestrial Wildlife Biologist

Enclosure: (3)

CC: Doug Backlund, SD Game, Fish and Parks, Pierre, SD
Jack Freidel, SD Game, Fish and Parks, Chamberlain, SD
Natalie Gates, US Fish and Wildlife Service, Pierre, SD
Andy Lindbloom, SD Game, Fish and Parks, Ft. Pierre, SD
Jill Shaffer, US Geological Survey, Jamestown, ND

References

- Bakker, K. K. 2005. South Dakota All Bird Conservation Plan. South Dakota Department of Game, Fish and Parks, Wildlife Division Report 2005-09, Pierre, South Dakota. 131 pages. Online at: <http://www.sdgifp.info/Wildlife/Diversity/Birdplan.pdf>
- Bales, B. T. 2007. Regional distribution and monitoring of bats, especially species of conservation concern, along the lower Missouri River in South Dakota. M.S. thesis. South Dakota State University, Brookings, South Dakota. 165 pages.
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- Johnson, R. R. and K. F. Higgins. 1997. Wetland resources of eastern South Dakota. South Dakota State University, Brookings, South Dakota. 102 pages.
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- Peterjohn, B. G., and J. R. Sauer. 1999. Population status of North American grassland birds from the North American Breeding Bird Survey, 1966-1996. *Studies in Avian Biology* 19:27-44.
- Samson, F. B., F. L. Knopf, and W. R. Ostlie. 1998. Grasslands. Pages 437-472 in M. J. Mac, P. A. Opler, C. E. Puckett Haecker, and P. D. Doran, editors. Status and Trends of the

Nation's Biological Resources, Vol. 2. U.S. Department of the Interior, U.S. Geological Survey.

Smallwood, K. W., C. G. Thelander, M. L. Morrison, L. M. Ruge. 2007. Burrowing owl mortality in the Altamont Pass wind resource area. *Journal of Wildlife Management* 71:1513-1524.

South Dakota Department of Game, Fish and Parks. 2006. South Dakota Comprehensive Wildlife Conservation Plan. South Dakota Department of Game, Fish and Parks Wildlife Division Report 2006-08, Pierre, South Dakota. 248 pages. Online at: http://www.sdftp.info/Wildlife/Diversity/Comp_Plan.htm

Swier, V. J. 2006. Recent distribution and life history information for bats of eastern South Dakota. *Museum of Texas Tech University Occasional Papers No. 264*. Texas Tech University Natural Science Research Laboratory, Lubbock, Texas. 21 pages.

Element Occurrence Records for Reliance Project Area
South Dakota Natural Heritage Database
December 5, 2007

Scientific Name: *Asclepias lanuginosa*
Common Name: Woolly Milkweed
Global Rank: G4?
State Rank: S2
Township Range: 107N074W
Section: 08
"Shaley soil of upland prairie hillside."

Occurrence #: 3
Last Observed: 1967-06-23
State Status:
Federal Status:
County: Lyman

Scientific Name: *Grus americana*
Common Name: Whooping Crane
Global Rank: G1
State Rank: SNA
Township Range: 106N073W
Section: 36
2 ADULTS RESTING

Occurrence #: 93
Last Observed: 1996-04-12
State Status: SE
Federal Status: LE
County: Lyman

Scientific Name: *Grus americana*
Common Name: Whooping Crane
Global Rank: G1
State Rank: SNA
Township Range: 105N072W
Section: 08
1 Whooping Crane seen flying

Occurrence #: 121
Last Observed: 2003-11-01
State Status: SE
Federal Status: LE
County: Lyman

Scientific Name: *Haliaeetus leucocephalus*
Common Name: Bald Eagle
Global Rank: G5
State Rank: S1B,S2N
Township Range: 105N073W
Section: 1

Occurrence #: 38
Last Observed: 2004-07-04
State Status: ST
Federal Status:
County: Lyman

NESTING PAIR, 2 FULLY FEATHERED BUT NOT QUITE FLEDGED
YOUNG ON JUNE 27. 2004-nest occupied with 2 fledged.

Scientific Name: *Haliaeetus leucocephalus*
Common Name: Bald Eagle
Global Rank: G5
State Rank: S1B,S2N
Township Range: 106N072W
Section: 31
Female incubating, male nearby

Occurrence #: 59
Last Observed: 2004-04-08
State Status: ST
Federal Status:
County: Lyman

Element Occurrence Record for Crow Lake Project Area
South Dakota Natural Heritage Database
December 5, 2007

Scientific Name: *Chlidonias niger*
Common Name: Black Tern
Global Rank: G4
State Rank: S3B
Township Range: 106N066W
Section: 26

Occurrence #: 4
Last Observed: 1993-07-07
State Status:
Federal Status:
County: Jerauld

20+ CIRCLING AND CALLING OVER ISOLATED CATTAIL
STAND



DEPARTMENT OF GAME, FISH AND PARKS

Foss Building
523 East Capitol
Pierre, South Dakota 57501-3182

INVOICE

December 5, 2007

Fee for South Dakota Natural Heritage Database Search performed for:

James Berg
Basin Electric Power Cooperative
1717 East Interstate Avenue
Bismarck, North Dakota 58503-0564

1 hour of staff time @ \$30.00 per hour	\$30.00
<u>Two computer searches @ \$30.00 per search</u>	<u>\$60.00</u>
TOTAL	\$90.00

For review of the following projects:

Proposed Wind Energy Facilities near Reliance and Crow Lake.

Make check payable to SD Dept. of Game, Fish and Parks

Submit payment to:

South Dakota Dept. of Game Fish and Park
523 E. Capitol-Foss Bldg.
Pierre, SD 57501
ATTN: Doug Backlund



DEPARTMENT OF GAME, FISH AND PARKS

Foss Building
523 East Capitol
Pierre, South Dakota 57501-3182

December 30, 2008

Kim R. Austin
Terracon Consultants, Inc.
1815 South Eisenhower
Wichita, KS 67209

RE: South Dakota Department of Game, Fish and Parks (SDGFP) environmental review of Prairie Winds Project in Tripp County, South Dakota

Dear Ms. Austin,

This letter is in response for your request for review of a proposed wind farm located on 75,000 acres in Tripp County. Please let us know if you have additional details regarding associated infrastructure, nameplate capacity or if major changes are made to the proposed project.

The proposed siting and operation of a wind power project has potential to directly and indirectly impact area wildlife. This may occur by altering important and declining habitats and influencing both breeding and movement behavior of wildlife and/or by killing bats and birds through wind turbine and power line strikes. While we applaud efforts to provide renewable energy sources, we offer the following information on wildlife habitats and associated species that contribute to South Dakota's natural heritage and that may be impacted by wind energy development. If major direct and indirect impacts are predicted, we recommend avoidance. If minor impacts are unavoidable, we recommend mitigation to lessen these impacts. We also provide additional contacts and resources for further information.

Doug Backlund, our Natural Heritage Program Database (NHPD) manager, will be providing you location information for species at risk and/or those that are rare and known to be within the Proposed Project Area. Species at risk are those that are threatened or endangered (legally protected) or rare. Rare species are those that are declining and restricted to limited habitat, peripheral to a jurisdiction, isolated or disjunct due to geographic or climatic factors or that are classified as such due to lack of survey data. Please note that absence of a species from the NHPD does not preclude its

presence in the Proposed Project Area. Many places in South Dakota have not been surveyed for rare or protected species. If you have questions regarding the NHPD search, please contact Doug Backlund at (605) 773-4345 or Doug.Backlund@state.sd.us.

HABITAT

Ecoregions (Bryce et al. 1998) - The Proposed Project Area is located primarily within two ecoregions: 1) Keya Paha Tablelands 2) Ponca Plains. The northern extension of the Proposed Project Area lies within the Subhumid Pierre Shale Plains. Ecoregions are areas that are similar in the type, quality, and quantity of environmental resources (e.g. geology, physiography, vegetation, climate, soils, land use, wildlife, and hydrology).

The Keya Paha Tablelands are found in the western half of the Proposed Project Area. This ecoregion is made of sandy, level to rolling plains. Annual precipitation is 16-20". Potential natural vegetation includes blue and sideoats grama, western wheatgrass, little bluestem, and needleandthread. Land use is predominately cattle ranching interspersed with some cropland (dryland and irrigated). The Ponca Plains are found in the eastern portion of the Proposed Project Area. These level to gently rolling plains are unglaciated. This ecoregion is more mesic than the Keya Paha Tablelands (20-22" annual precipitation). Little bluestem, prairie sandreed, green needlegrass and needleandthread are potential natural vegetation grass species. Intensive row crop agriculture is located in some portions of this ecoregion. Cattle are grazed on certain soils.

Grasslands - The Proposed Project Area is located within the mixed-grass prairie zone. Native prairie within this zone is decreasing at an alarming rate. Seventy percent of the native mixed-grass prairie has been lost in South Dakota (Samson et al. 1998). Areas of untilled prairie have high conservation value for wildlife, especially those that contain a high diversity of both plant and animal species with invasive species being rare or absent. Based upon soil-type, areas of untilled native prairie most likely remain in the Proposed Project Area. Every effort should be made to avoid placement of turbines in high quality native prairie.

Other grassland types are found in the Proposed Project Area. These include rangeland, pasture, hayland, or idle grassland. Rangeland supports native vegetation suitable for grazing or browsing. It includes areas where native vegetation has been reestablished. The vegetation is mainly grasses, grasslike plants, forbs, or shrubs. The amounts and kinds of native vegetation in any one area are determined by the soil, topography, climate, past use, and management. Pasture and hayland are used for the production of adapted domesticated perennial forage plants that are grazed or hayed. These forage plants may be either native or introduced species and may be seeded alone or in mixtures. An example of idle grasslands is Conservation Reserve Program land (highly-erodible, tilled land taken out of crop production). These agricultural and idle grassland types serve as important habitat for grassland wildlife (Haufler 2005).

One of the major threats to grassland dependent wildlife is habitat degradation and destruction. This degradation can result from fragmentation (unnatural woody encroachment and plantings in inappropriate places, road construction, etc.). Some grassland wildlife species depend on large patches of habitat. These smaller disjunct patches often provide less suitable habitat for many native species of grassland wildlife. Due to the nature of the sandy soils and the large amount of rangeland in the area, much of the Proposed Project Area (excluding the northern extension and the extreme eastern edge) presumably contains large contiguous tracts of grassland. Efforts should be made to avoid activities that may fragment contiguous grassland tracts.

Wetlands (Rieger et al. 2006) – Natural wetland basins of various depths and sizes occur throughout South Dakota. In western South Dakota, a small proportion of the land area is comprised of wetlands. In this drier western region, these wetlands are particularly important and especially so in times of drought. Tripp County contains the greatest number of wetland basins (12.1%) of all western South Dakota basins. Tripp County also has the fifth largest wetland basin area in western South Dakota. In addition, this county has the highest wetland basin density (50 basins/10km²) of the 22 western South Dakota counties. Placement of turbines should avoid areas with concentrations of wetlands.

WILDLIFE

Grassland birds - Grassland birds have shown the most consistent and long term declines of any other group of bird species in North America (Peterjohn and Sauer 1999). Placement of a wind farm in the Proposed Project Area may reduce habitat suitability for grassland birds (increase habitat fragmentation and invasive species) and modify behavior (e.g. avoidance). Some grassland bird species have been shown to favor large grassland patches (Johnson 2001, Johnson and Igl 2001, Svedarsky et al. 2003). Species that may occur in or near the Proposed Project Area and that have indicated area sensitivity include northern harrier, upland sandpiper, grasshopper sparrow, and bobolink.

Two grassland bird species of interest to SDGFP that may be found in the Proposed Project Area include the sharp-tailed grouse and greater prairie chicken. Note that the greater prairie chicken is a Species of Greatest Conservation Need as identified in our State Wildlife Action Plan (http://www.sdgfp.info/Wildlife/Diversity/Comp_Plan.htm).

The primary range of the sharp-tailed grouse in South Dakota is west of the Missouri River. It is a common (more than 25 individuals would be seen in appropriate habitat by a single observer) permanent resident. Sharp-tailed grouse are known to occur in Tripp County, near the Proposed Project Area. This species prefers grassland habitat (mid- to tall-grasses) with brushy draws and thickets. Courtship activity on communal display grounds (leks) occurs between late-March through April. Nesting also begins during this time. Leks are located on hilltops or other elevated sites with minimal vegetation. Nest sites are found within approximately 0.5 miles of the lek. Nests typically hatch

from last week in May through the first week in June. Deterioration of native grasslands, reduction of nesting and brood rearing cover, and variable climatic factors are limiting factors for this species.

The greater prairie-chicken is an uncommon (fewer than 25 individuals would be seen in appropriate habitat by a single observer) permanent resident in Tripp County. This species prefers tall- to mixed-grass prairies. Breeding behavior occurs on communal display grounds (leks) primarily between late-March through April. Nesting occurs in mid-May to June. Leks are located on barren areas or on areas with minimal cover. This species nests in grasslands (prairies, pastures, hayfields) located near (1-3 miles) lek site. Loss and fragmentation of tallgrass prairie considered reason for population declines.

These two species are known to be area-sensitive, requiring comparatively large tracts of open, contiguous grassland. The lesser prairie chicken, a similar species found more commonly in the southern Great Plains, avoids nesting within 400 m of transmission lines or improved roads (Pitman et al. 2005). This suggests that placement of turbines and associated infrastructure (roads and transmission lines) also may negatively affect greater prairie chickens.

We recommend that properly timed, species-appropriate surveys for breeding grassland birds be conducted before construction. Many privately-owned areas in South Dakota have not been surveyed for grassland songbirds or prairie grouse. Grassland songbird surveys are best conducted in June, although mid-May through early July is acceptable. Breeding ground (lek) surveys for prairie grouse species should be conducted in the spring (late March through April). Our agency respectfully requests a written summary of these surveys.

Waterfowl - The trumpeter swan is monitored by the Natural Heritage Program and these records show breeding pairs in or near the Proposed Project Area boundary. This species is a rare breeder in western South Dakota and records show migration through eastern South Dakota. An overwintering population of birds exists in the southcentral to southwestern portion of the state. These are most likely different individuals that those that breed here. This species inhabits shallow lakes and open marshes. Nesting occurs from mid-April through July. Five eggs are laid with an average of three young produced. Fledglings are present in South Dakota as late as August and September. Young birds can fly at 90-122 days after hatching. Adult pair bonds are maintained for life. Records of migration through eastern South Dakota are as early as April and banding recoveries show movement south in late-October and early-November. This species is sensitive to disturbance and pollution. Winter habitat availability and quality are a concern for this species. The trumpeter swan is the largest of the swans found in South Dakota. It can be differentiated from other swans by its size, yellow lores, and the visible kink at the base of the neck when the animal is at rest.

Waterbirds - This proposed project location is within the primary migration route of the 'Aransas National Wildlife Refuge to Wood Buffalo National Park' population of

whooping cranes. This species is protected as endangered under both state and federal laws. Placement of turbines in this area could very likely increase the chances of wind turbine and power line strikes and electrocutions. We are concerned about the direct impacts a potential wind power project may have on this population of whooping cranes. This species is state and federally protected. The federal Endangered Species Act is administered by the US Fish and Wildlife Service. As such, I recommend contacting the U.S. Fish and Wildlife (USFWS) Ecological Services Field Office in Pierre, SD for further information (605-224-8693 or southdakotafieldoffice@fws.gov). Also, please note that Virginia rails have been documented breeding on Little Dog Ear Lake Game Production Area.

Raptors - Improperly sighted wind farms are known to cause significant mortality to raptors. The Swainson's hawk is a raptor monitored by the NHP and has been documented breeding in the Proposed Project Area. Swainson's hawk is a common migrant in the state. In the north and west it is a common breeder; it is uncommon to rare in other portions of the state. This is a raptor of prairies and agricultural land with scattered trees. Spring migration occurs in the latter part of April with most birds returning south in mid-September. Nesting for this species takes place from late April to early August. This species may be easily disturbed during nesting.

In consideration of high soaring birds, especially raptors, placement of turbines in areas of elevation (e.g. ridges) should be avoided if raptor use is high. The Proposed Project Area should be surveyed for these high-raptor use areas.

Our records indicate no nesting bald eagles in the area. However, they may be nesting in the area without our knowledge. Migrant bald eagles also are possible in the spring and fall. Please know that the bald eagle is state protected as a threatened species. This species also is protected by the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act which are both administered by the USFWS. As such, I recommend contacting the USFWS Ecological Services Field Office in Pierre.

Bats – Construction of a wind power project may interfere with daily and seasonal bat movements between breeding and foraging areas, including mortality of individual bats. There has been limited research conducted on bats in South Dakota. However, thirteen species of bats are currently known to be found in South Dakota, some of which are summer residents, year-round residents, or migratory (Table 1).

Table 1. South Dakota Bats

Common Name	Scientific Name	State Residency
Big Brown Bat	<i>Eptesicus fuscus</i>	Year-round resident
Fringed-tailed Myotis*	<i>Myotis thysanodes</i>	Year-round resident
Little Brown Myotis	<i>Myotis lucifugus</i>	Year-round resident
Long-eared Myotis*	<i>Myotis evotis</i>	Year-round resident
Long-legged Myotis	<i>Myotis volans</i>	Year-round resident
Northern Myotis*	<i>Myotis septentrionalis</i>	Year-round resident

Townsend's Big-eared Bat*	<i>Corynorhinus townsendii</i>	Year-round resident
Western Small-footed Myotis	<i>Myotis ciliolabrum</i>	Year-round resident
Hoary Bat	<i>Lasiurus cinereus</i>	Summer resident
Eastern Red Bat	<i>Lasiurus borealis</i>	Summer resident
Silver-haired Bat*	<i>Lasionycteris noctivagans</i>	Summer resident
Evening Bat*	<i>Nycticeius humeralis</i>	Migratory
Eastern pipistrell	<i>Pipistrellus subflavus</i>	unclassified

* = monitored by the Natural Heritage Program

Six bat species have a probable current distribution in Tripp County: 1) Northern myotis, 2) Western small-footed myotis, 3) little brown myotis, 4) silver-haired bat, 5) big brown bat, 6) eastern red bat, 7) hoary bat (Higgins et al 2000). The silver-haired bat, one of South Dakota's tree-roosting and migratory bats, is rare and monitored by the NHP (Table 1). Silver-haired bats have a probable distribution throughout the state of South Dakota. They require trees for roosting and maternity sites. In eastern South Dakota, they are found roosting in wooded areas along water courses. In treeless areas, they use fence post piles, boards, and bricks for roosts. Foraging areas include corridors found along roads and waterways. In the Black Hills, most silver-haired bats are captured during the summer (June to September). Mating takes place during late summer and two pups are usually born in June. Structural diversity in roosting habitats is required for this species. Because of limited, project-specific data we suggest pre-construction surveys of the area for potential bat habitat and species. Surveys for species should be conducted for at least one full year before construction. Please provide a written summary of these surveys to our agency.

South Dakota Department of Game, Fish and Parks in cooperation with the South Dakota Bat Working Group (SDBWG), developed the *South Dakota Bat Management Plan* specific to bats and their habitats in South Dakota (<http://www.sdgifp.info/Wildlife/Diversity/batmanagementplan71304.pdf>). Please review this document for additional pertinent information.

Migrating Wildlife - Both bats and birds are known to be susceptible to direct strikes with wind turbines. Bat species that migrate long distances, such as migratory tree-roosting species, are commonly found killed by wind farms in the United States (Kunz et al. 2007). Red, hoary and silver-haired bats are migratory tree-roosting species. However, other species also are susceptible to direct strikes (i.e. big brown bat; Higgins et al. 2007). The earliest spring migration record for silver-haired bats in South Dakota is late-April in Brookings County. Fall migration for this species begins in late-August to early-September. It is hypothesized that red bats migrate into the state in April and leave in August and September. Specific timing of hoary bat migration in South Dakota is not known.

At currently levels of wind energy development in the United States, it is estimated that avian mortality associated with wind turbines is less than 1% of all avian collision fatalities (Erickson et al. 2001). Even this mortality can be reduced by siting wind power

projects in areas that have low bird use. The Central Flyway, an important pathway for migratory ducks, geese, swans, and cranes runs through the midsection of the country, including South Dakota. Species using this flyway during migration, and particularly during inclement weather when birds alter their flight altitude, may suffer increased mortality due to direct strikes with wind turbines and associated power lines. Rivers are often used to guide in migration. The Missouri River also is located within this Flyway. Spring migration can begin as early as late-March and tapering off in mid-May, depending on the species. Fall migration can begin as early as mid-July and extend through October/November depending on weather conditions and species.

Placement of turbines should be in areas away from daily and seasonal migration routes (i.e. to and from feeding or roosting areas and to and from breeding or wintering grounds) of both birds and bats. If this proposed project is constructed, we recommend conducting post-construction mortality searches for both bats and birds for two years post-construction to evaluate siting decisions. These searches should estimate searcher efficiency and incorporate scavenging trials. A written report of these surveys should be provided to our agency.

Invertebrates - The American burying beetle has been extirpated from approximately 90% of its former range. This species is known to remain in seven states, including South Dakota. Within the state, the range of the American burying beetle is restricted to areas relatively undisturbed by human influence and commonly with sandy soils. This species is found in southern Trip County and portions of Todd and Gregory Counties. It is found within the Proposed Project Area boundary.

The American burying beetle is a large (25-45 mm or 1-1.5"), black and orange, carrion-eating beetle. It is nocturnally active requiring night time air temperatures at a minimum of 60°F. This species can be distinguished from similar beetles by its orange-red pronotum and frons. This beetle uses carcasses that weight 100-250 grams (0.2-0.6 lbs). These carcasses are located using chemoreceptors. Carcasses are buried and preserved with bodily secretions. A brood chamber is built adjacent to the carcass and approximately 10-30 eggs are laid in June and July. Adults care for the resulting larvae by feeding them carrion. Teneral beetles emerge in July and August. After an underground, overwintering period, these young, soft beetles become the entire adult population the following year. Only one brood is raised/year. Adults die after the breeding season, living only for approximately one year. Adult beetles can fly moderate distances. Reasons for decline are complex and not well understood but include habitat fragmentation and isolation, reduction in availability of preferred carrion sizes, human activity, pesticides, and behavior modification from artificial night lighting. This species is federally protected. Please contact the USFWS Ecological Services Field Office in Pierre, SD. More information on the population found in South Dakota can be found at <http://www.sdgifp.info/wildlife/diversity/ABB/ABB.htm>.

OTHER

Landscape considerations - Placement of a wind power project should take into account larger landscape-level (e.g. surrounding land uses) and cumulative impacts (e.g. existing and potential wind power projects) as well as project associated infrastructure (i.e. transmission lines and roads).

Public lands - Placement of public lands is often done so in areas with existing and potential wildlife habitat. Management of these lands, for wildlife, is conducted in the public interest. Wildlife that use these areas may be affected by the placement of a wind power project in the area. There are three tracts of public lands that exist near or just within the Proposed Project Area boundary: 1) Dog Ear Lake, 2) Little Dog Ear Lake, and 3) and Roosevelt Dam. The location of these and other public lands can be found on line at <http://www.sdgfp.info/Wildlife/PublicLands/PubLand.htm>. All three of these Game Production Areas have records of species monitored by the NHP.

Powerlines – New power lines are often associated with a proposed wind power project. Power line strikes are a known cause of mortality to birds (Erickson et al. 2005). Waterfowl (ducks, geese, swans, and cranes), raptors, and passerines are species most susceptible to powerline collisions. The Avian Protection Power line Interaction Committee has developed two documents that may be of use to reduce powerline strikes and mortality: 1) *Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006* and 2) *Mitigating Bird Collisions with Power Lines*. Both of these documents are available from the Edison Institute (<http://www.aplic.org/>, under 'products and services'). New and existing power lines associated with the proposed project should be buried if at all possible, marked, or retrofitted to reduce strikes and electrocutions of bird species.

Non-native/invasive plant species - During the construction and maintenance phase of a wind power project existing roads often experience increased traffic and new roads are constructed. This increases the amount of area disturbed and increases opportunity for the introduction and establishment of non-native plant species. Resulting control of those species through pesticides and herbicides may also impact habitats of rare wildlife species. Invasive, non-native plant species are one of the major threats to threatened and endangered wildlife species. Improved access can also increase human disturbance to wildlife in the area. Any disturbance to native vegetation should be kept to a minimum. Disturbed areas should be revegetated using native seed sources. The Natural Resource Conservation Service Plant Materials Center in Bismarck, ND may serve as a good source of information on native plantings (<http://plant-materials.nrcs.usda.gov/ndpmc/>). Additional information on where to get these seed sources and how and why to establish them can be found at the following links:

- Five Reasons to Choose Native Grasses
 - <http://www.plant-materials.nrcs.usda.gov/pubs/ndpmctn7875.pdf>
- Five Myths Concerning Native Grass Varieties

- <http://www.plant-materials.nrcs.usda.gov/pubs/ndpmcsy5406.pdf>
- **Origins of Native Grass and Forb Releases**
 - <http://www.plant-materials.nrcs.usda.gov/pubs/ndpmctn6786.pdf>
- **Conservation Seed/Plant Vendors List**
 - <http://plant-materials.nrcs.usda.gov/NDPMC/pubs/ndpmcot8-CSPVendor.pdf>
- **Prairie Landscaping Seed/Plant Vendors List**
 - <http://plant-materials.nrcs.usda.gov/NDPMC/pubs/ndpmcot8-PLVendor.pdf>

Research and monitoring - Northern Prairie Wildlife Research Center, a part of the US Geological Survey, is currently investigating the influence of wind generators on breeding grassland bird density and species composition in the Dakotas. The results of this study may be of interest as you work on the siting and development of this proposed project. Please contact Jill Shaffer (701-253-5547 or jshaffer@usgs.gov) for more information.

Please note that if survey and monitoring activities includes live trapping or collection of wildlife species, you must first obtain a collection permit from our agency. If these activities include bats, specific sampling and collection protocols must be followed for a collectors permit to be issued. More information can be found by contacting Doug Backlund or at the following websites:

- **Scientific Collectors Permit**
 - http://www.sdgifp.info/Wildlife/Diversity/free_scientific_collector.htm
- **Bat Sampling and Collection Protocol Guidelines and Requirements**
 - <http://www.sdgifp.info/Wildlife/Diversity/batprotocol.pdf>

If during your monitoring activities you or your associates observe any of the animal or plant species monitored by the NHP, we request that reports of these observations be provided to the NHP. A list of monitored species can be found at <http://www.sdgifp.info/Wildlife/Diversity/>.

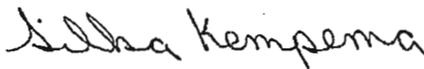
Siting - In coordination with the SDBWG, the SDGFP has developed *Siting Guidelines for Wind Power Projects in South Dakota*. This document addresses many of the concerns involved with siting wind power projects in South Dakota and may be found on the web (<http://www.sdgifp.info/Wildlife/Diversity/windpower.htm>). These voluntary guidelines are currently being updated using a multi-stakeholder, consensus-based approach. A new set of guidelines is scheduled to be available in the spring of 2009.

Summary - As outlined above, our agency has concerns regarding direct and indirect impacts to wildlife and habitats in association with the siting of the proposed project. The Proposed Project Area contains quality habitats with a variety of wildlife species important to the natural heritage of South Dakota. Of particular concern are impacts to large native prairie areas, the American burying beetle, whooping crane, and trumpeter swan. Because of the potential impacts placement of the proposed wind power project would have on unique and declining habitats in the region and their associated species, we recommend the following:

- Avoid placement of turbines in high quality native prairie.
- Avoid activities that may fragment contiguous grassland tracts.
- Avoid placement of turbines in wetland areas, especially those with high concentrations of basins.
- Properly timed, species-appropriate surveys for breeding grassland birds should be conducted before construction.
- Avoid placement of turbines in areas with high use by raptors.
- Conduct pre-construction surveys for potential bat habitat and species.
- Place turbines away from daily and seasonal bird and bat migration routes.
- Conduct post-construction mortality searches for bats and birds (\geq two years).
- Power lines should be buried, marked, or retrofitted.

The SDGFP appreciates the opportunity to provide comments. If you have any questions on the above comments, please feel free to contact me at 605-773-2742 or Silka.Kempema@state.sd.us.

Regards,



Silka L. F. Kempema
Terrestrial Wildlife Biologist

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From: "Ultimate Hunts" <assmand@gwtc.net>
To: <sdprairiewinds@wapa.gov>
Date: 5/15/2009 7:30 PM
Subject: Upgrade Western Area Power Administrator

To: Ms. Liana Reilly

WAPA Corporate Services Offices

My wife and I would like to give our support to the upgrading of the WAPA lines running through south central South Dakota. We are very much in favor of wind development and the expansion of wind projects in our area. This area is in immediate need of economic development which would benefit our local governments and school districts.

Our area is in one of the top wind producing areas in the country. We can certainly generate an enormous amount of electricity with wind power. The only thing we need are "transmission lines". This would be a boom to our area and also to the areas where they need additional electricity.

We hope that WAPA will do all they can to promote the construction of these transmission lines.

Thank you,

Dennis and Jane Assman

28375 SD Hwy 53

Winner, SD 57580

605-842-2977



United States Department of the Interior



In Reply Refer To:

BUREAU OF LAND MANAGEMENT
South Dakota Field Office
310 Roundup Street
Belle Fourche, South Dakota 57717-1698
<http://www.blm.gov/mt>

1790
RWP

May 7, 2009

Ms. Liana Reilly, Document Manager
Western Area Power Administration
Corporate Services Office, A7400
P.O. Box 281213
Lakewood, Colorado 80228-8213

Dear Ms. Reilly:

The Bureau of Land Management appreciates the opportunity to review and provide comments regarding the subject ER 09/396. However, the BLM has no jurisdiction or authority with respect to the project, the agency does not have expertise or information relevant to the project, nor does the agency intend to submit comments regarding the project.

If you have any questions, please contact Russ Pigors at 605-892-7006, or at the address or email address above.

Sincerely,

Marian M. Atkins
Field Manager, South Dakota



**South Dakota PrairieWinds Project
Environmental Impact Statement (EIS)**

Thank you for your interest in the proposed South Dakota PrairieWinds Project (Project). Please complete the appropriate sections of this form to be included on the Project mailing list and/or to provide comments. Written comments can be submitted at the Scoping Meeting, faxed to (720) 962-7263, mailed to the address on the back of this form or sent to the **Project Email Address: sdprairiewinds@wapa.gov**. Comments on the project scope and alternatives should be received by **May 15, 2009**, to be considered in defining the scope for the Draft EIS. For more information about the Project, please go to the **Project Website: <http://www.wapa.gov/sdprairiewinds.htm>**.

- I would like to be kept informed of the ongoing progress of this Project. Please include my name on the mailing list.
- I prefer electronic/email communication.
- I prefer paper mailings.

Please Print Contact Info Below

<u>Name:</u> <i>Jerry & Arliss Bennett</i>	<u>Organization:</u>
<u>E-mail address:</u>	<u>Daytime Phone No. (optional):</u>
<u>Street Address:</u>	<u>City / State / Zip Code:</u>

Please indicate any questions, comments or concerns you have about the Project in the comment section below (continue on separate sheet if necessary).

Thank you for your time and interest in the South Dakota PrairieWinds Project.



**South Dakota PrairieWinds Project
Environmental Impact Statement (EIS)**

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- I prefer electronic/email communication.
- I prefer paper mailings.

Please Print Contact Info Below

<u>Name:</u> SANDRA BRADWISCH	<u>Organization:</u> White Lake City Council
<u>E-mail address:</u>	<u>Daytime Phone No. (optional):</u>
<u>Street Address:</u>	<u>City / State / Zip Code:</u>

Please indicate any questions, comments or concerns you have about the Project in the comment section below (continue on separate sheet if necessary).

I am pleased and it is my pleasure to welcome all of you to WHITE LAKE South Dakota.

Should you have any questions or if I can be of help please contact me.

Sincerely,
Sandra Bradwisch

Thank you for your time and interest in the South Dakota PrairieWinds Project.



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Please Print Contact Info Below

<u>Name:</u> <i>Charlotte Brown</i>	<u>Organization:</u> <i>Lincoln House B+B</i>
<u>E-mail address:</u>	<u>Daytime Phone No. (optional):</u>
<u>Street Address:</u>	<u>City / State / Zip Code:</u>

Please indicate any questions, comments or concerns you have about the Project in the comment section below (continue on separate sheet if necessary).

We have a bed & breakfast with 14 rooms available. If you select the Crow Lake site we would be in driving distance for power your employees. We also have a 4000 sq ft building which could serve as office space for you or be remodeled to build components you might need. We would be willing to help on this project any way possible.

Thank you for your consideration.

Thank you for your time and interest in the South Dakota PrairieWinds Project.



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Please Print Contact Info Below

Name: *Eugene H Brumbaugh*

Organization: *Individual*

E-mail address:

Daytime Phone No. (optional):

Street Address:

City / State / Zip Code:

Please indicate any questions, comments or concerns you have about the Project in the comment section below (continue on separate sheet if necessary).

The current powerline system that is in use at present ~~is~~ old and unable to compete with the upcoming need for electricity across the nation.

The need to upgrade and improve is ~~critical~~ critical to South Dakotas new greenpower wind turbine systems.

Thank you for your time and interest in the South Dakota PrairieWinds Project.



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Please Print Contact Info Below

<u>Name:</u> <i>Jim Burg</i>	<u>Organization:</u> <i>Wess. Spr. Mayor</i>
<u>E-mail address:</u>	<u>Daytime Phone No. (optional):</u>
<u>Street Address:</u>	<u>City / State / Zip Code:</u>

Please indicate any questions, comments or concerns you have about the Project in the comment section below (continue on separate sheet if necessary).

I feel fish and wildlife has as much to gain from the development of clean renewable energy. However fish and wildlife is the greatest impediment to wind development. If the requirements were spelled out and approval given if these requirements were met it would be acceptable. However if appears that compliance is a continually moving target, very difficult to meet. Every wind development I have been involved with says fish and wildlife compliance is by far the most difficult. I feel wind development will enhance habitat by making a turbine farm hard to till and the income from turbines will reduce the pressure to break habitat for a more profitable use. I have heard federal fish and wildlife representatives compliment and encourage clean wind energy development but EIS, especially endangered species make this a real challenge.

Thank you for your time and interest in the South Dakota PrairieWinds Project.

From: <Mike.Cornelison@state.sd.us>
To: <sdprairiewinds@wapa.gov>
Date: 4/22/2009 2:26 PM
Subject: RE: Maps failed to go through

Liana I did get you message not sure why the maps failed.

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

From: sdprairiewinds sdprairiewinds [mailto:sdprairiewinds@wapa.gov]
Sent: Wednesday, April 22, 2009 2:53 PM
To: Cornelison, Mike
Subject: Maps failed to go through

Hello Mike-

I tried to send you the more detailed maps for the SD PrairieWinds Project, but the email got sent back to me. I will try to send them one at a time momentarily.

Thank you for your interest and support for the project.

Best regards,
Liana

Liana Reilly
NEPA Project Manager

From: sdprairiewinds
To: Mike.Cornelison@state.sd.us
Date: 4/20/2009 7:00 AM
Subject: Re: Western & RUS (EIS) site maps (Crow Lake Site and Winner Site)

Dear Mr. Cornelison,

Thank you for your comment and your interest in the South Dakota Prairie Winds Project. We hope to have more detailed maps at the interagency meeting as well as at the scoping meetings. You can also check our website for updated information: www.wapa.gov/sdprairiewinds.htm. Any updated information will be posted there as soon as it is available. The applicant for the project is currently working on printing more detailed maps for next weeks meetings.

Please let us know if there is anything else that we can do to assist you.

Best regards,
Liana

Liana Reilly
NEPA Project Manager

>>> <Mike.Cornelison@state.sd.us> 4/15/2009 10:27 AM >>>
We received an invitation dated April 9th 2009 to participate in your interagency meeting scheduled on April 28th and to attend scoping meetings for the project. Do either of you have knowledge of who to contact to get either an expanded site map or something with more detail. I was having trouble seeing much detail in the site map sent with the invitation. My phone number is 605-773-4172.

From: <Postmaster>
To: <sdprairiewinds@wapa.gov>
Date: 4/22/2009 11:21 AM
Subject: Delivery Notification <mike.cornelison@state.sd.us>
Attachments: status.txt; Maps

This is a delivery status notification, automatically generated by MTA asmtpgw2u.wapa.gov on Wed, 22 Apr 2009 11:20:44 -0600

Regarding recipient(s) : mike.cornelison@state.sd.us

Delivery status : Failed. Message could not be delivered to domain <state.sd.us> .Failed while initiating the protocol. <[('mike.cornelison@state.sd.us', 550, 'Rule imposed mailbox access for mike.cornelison@state.sd.us refused')]>

MTA Response :550

The original message headers are included as attachment.



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- I prefer paper mailings.

Please Print Contact Info Below

<u>Name:</u> Ron DeMers	<u>Organization:</u>
<u>E-mail address:</u>	<u>Daytime Phone No. (optional):</u>
<u>Street Address:</u>	<u>City / State / Zip Code:</u>

Please indicate any questions, comments or concerns you have about the Project in the comment section below (continue on separate sheet if necessary).

Glad you had the meeting with the other company in the news it was good you had one. It was a good meeting full speed ahead. Enjoy working with your people.

Thanks
Dm & Kate DeMers

Thank you for your time and interest in the South Dakota PrairieWinds Project.

Commissioners:

Denny Deffenbaugh, Chairman
Dennis Vedral
Robert Sperl, Sr.
Darrell Bentz
Lance Matucha

Gregory County
Board of Commissioners
P.O. Box 437
221 E. 8th Street
Burke, South Dakota 57523-0437

Phone:
(605)775-2664
Fax:
(605)775-2596

May 6, 2009

Ms. Liana Reilly
Western Area Power Administration
Corporate Services Office, A7400
PO Box 281213
Lakewood, Colorado 80228-8213

Dear Ms. Reilly,

Gregory County supports wind farm development in Gregory County and is requesting that you provide power lines to handle wind energy.

Of course, as you are aware, Federal and State statutes must be complied with.

Sincerely yours,



Denny Deffenbaugh, Chairman
Gregory County Commissioners

From: sdprairiewinds
To: Wesley Acres
Date: 5/1/2009 10:10 AM
Subject: Re: question on meeting today in Plankinton

Hello Donna-

Thank you for your interest in the proposed South Dakota PrairieWinds Project. I apologize for not getting back to you earlier, but we were on our way to the meeting. I hope that you got your questions answered. If not, please feel free to let me know if there are any questions that I can answer for you.

Best regards,
Liana

Liana Reilly
NEPA Project Manager

>>> "Wesley Acres" <wesleyacres@midconetwork.com> 4/29/2009 2:02 PM >>>

I would like some info on the meeting in Plankinton to day. Will this be a formal meeting lasting from 4-7 or come and go as you please from 4-7 today in Plankinton SD

thanks
donna



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- I prefer paper mailings.

Please Print Contact Info Below

Name:

Edward Dostal

Organization:

E-mail address:

Daytime Phone No. (optional):

Street Address:

City / State / Zip Code:

Please indicate any questions, comments or concerns you have about the Project in the comment section below (continue on separate sheet if necessary).

I think that we need a transmission system to handle a large amount of wind turbines that are coming to South Dakota as well as upgrading current systems.

Thank you for your time and interest in the South Dakota PrairieWinds Project.



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Please Print Contact Info Below

<u>Name:</u> ROM COLLEN	<u>Organization:</u> BROSZ ENGINEERING
<u>E-mail address:</u>	<u>Daytime Phone No. (optional):</u>
<u>Street Address:</u>	<u>City / State / Zip Code:</u>

Please indicate any questions, comments or concerns you have about the Project in the comment section below (continue on separate sheet if necessary).

I AM A LIFETIME RESIDENT OF NW AUNDA COUNTY - I SEE NO NEGATIVE IMPACTS TO THE ENVIRONMENT. WITH THE WIND RESOURCES AVAILABLE IN THIS AREA EFFORTS SHOULD BEGIN OR BE INCREASED TO DEVELOP A BETTER TRANSMISSION INFRASTRUCTURE.

Thank you for your time and interest in the South Dakota PrairieWinds Project.