APPENDIX G

PRAIRIEWINDS EIS PRELIMINARY SCOPING REPORT

SCOPING REPORT

South Dakota PrairieWinds Project Environmental Impact Statement

U.S. Department of Energy
Western Area Power Administration

U.S. Department of Agriculture
Rural Utilities Service

July 2009

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Appendices

Acronym and Abbreviation List

Applicants	Basin Electric and PrairieWinds
Basin Electric	Basin Electric Power Cooperative
BIA	Bureau of Indian Affairs
BLM	Bureau of Land Management
CEQ	Council on Environmental Quality
CWA	Clean Water Act
CFR	Code of Federal Regulations
DOE	Department of Energy
EIS	Environmental Impact Statement
EPA	Environmental Protection Agency
ESA	Endangered Species Act
Intertribal COUP	Intertribal Council on Utility Policy
kV	Kilovolt
MW	Megawatt
NEPA	National Environmental Policy Act
NOI	Notice of Intent
PrairieWinds	PrairieWinds SD1, Incorporated
RPS	Renewable Portfolio Standards
RUS	Rural Utilities Service
SDGFP	South Dakota Game, Fish and Parks
SDPUC	South Dakota Public Utilities Commission
SHPO	State Historic Preservation Office
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
Western	Western Area Power Administration

1.0 INTRODUCTION

PrairieWinds SD1, Incorporated (PrairieWinds), a subsidiary of Basin Electric Power Cooperative (Basin Electric), has proposed to develop a wind-powered generating facility in south-central South Dakota, either near Wessington Springs or near Winner. Basin Electric has requested to interconnect the proposed project with the transmission system owned and operated by Western Area Power Administration (Western), an agency within the Department of Energy (DOE). PrairieWinds has requested financing for the proposed project from the Rural Utilities Service (RUS), an agency within the U.S. Department of Agriculture (USDA). PrairieWinds and Basin Electric are collectively termed the "Applicants".

Basin Electric's generation interconnection request and PrairieWinds's financing request trigger a National Environmental Policy Act (NEPA) review process of the proposed project by Western and RUS, respectively. Western and RUS have determined that an environmental impact statement (EIS) is required and are serving as co-lead Federal agencies for preparation of the document (EIS Determination included in **Appendix A**). Western will serve as the lead Federal agency for consultations with the U.S. Fish and Wildlife Service (USFWS) under section 7 of the Endangered Species Act. Western will also serve as the lead Federal agency for consultation with the South Dakota State Historic Preservation Office (SHPO) under section 106 of the National Historic Preservation Act (NHPA).

As part of the NEPA process, public participation engages a diverse group of public and agency participants by providing timely information to them, solicits relevant input from them throughout the environmental review process, and provides feedback to them on how their input influenced the decision. Western and RUS will use input identified through public participation to assist with the development of the scope, content, and alternatives analysis for the EIS for the proposed project. By incorporating public participation into the development of the EIS, Western, RUS, and USFWS as a cooperating agency, will be able to make more informed decisions on their respective proposed actions. The public outreach process for this proposed project has included direct mailings, public scoping meetings, and interagency coordination. Future public participation opportunities will include project update mailings, review and comment on the Draft EIS, and at least one public hearing. Following this process, Western and RUS will issue separate Records of Decision with relation to their proposed actions.

This document summarizes the input that has been received on the proposed project through the end of the scoping process. It organizes the input into issue topics and identifies issues that will be addressed in the EIS. Section 2 provides background on the proposed project and needed agency actions. Section 3 outlines the public involvement process that was employed to solicit comments. Section 4 provides a summary of the comments received. Copies of the notices, mailing lists, meeting materials, and comments that have been received are included in the appendices to this report.

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2.0 BACKGROUND AND NEED FOR AGENCIES' ACTIONS

This section provides background information on the proposed project, describes the background of the agencies as well as the need for agency action, and describes the Applicants' purpose and objectives.

2.1 Applicants' Proposed Project

The proposed PrairieWinds project would involve the installation and operation of a 150-megawatt (MW) wind energy facility that would feature 101 wind turbine generators. Each tower would have a hub height of 262 feet and a turbine rotor diameter of 252 feet. The total height of each wind turbine would be 389 feet with a blade in the vertical position. The towers would be constructed of tubular steel, approximately 15 feet in diameter at the base, with internal joint flanges. The color of the towers and rotors would be standard white or off-white. During construction, a work/staging area at each turbine would include the crane pad and rotor assembly area, temporarily disturbing an area about 190 feet by 210 feet.

Each wind turbine would be connected by a service road for access and a 34.5-kilovolt (kV) underground electrical collection system that would ultimately route the power from each turbine to a central collector substation(s), where voltage would be stepped up for interconnection to Western's transmission system. About 30 to 40 miles of new access roads would be built to facilitate both construction and maintenance of the turbines. Approximately 25 to 35 miles of existing roads would be used and, where appropriate, improved.

Figure 2-1 on page 4 depicts the wind resource potential on a map of South Dakota. following that map, **Figure 2-2** depicts the proposed project alternative sites. Two site alternatives, Crow Lake and Winner, are under consideration for the wind-powered generation facility. The Crow Lake Site is located on approximately 37,000 acres and is approximately 15 miles north of White Lake, South Dakota, within Brule, Aurora, and Jerauld counties. The Winner Site is located within an approximately 83,000-acre area entirely within Tripp County, and is approximately 8 miles south of Winner, South Dakota. Individual aerial maps of each of the proposed project alternative sites are included in **Appendix B**.

The Crow Lake Site would require a new 230-kV transmission line to deliver the power from the collector substation(s) to a new 230-kV interconnection point at Western's existing Wessington Springs Substation, located in Jerauld County. The Wessington Springs Substation is located approximately 9 to 12 miles from the proposed collector substation(s). The proposed line would be built using wood or steel H-frame (two pole) structures or steel single-pole structures. The structures would be approximately between 85 and 95 feet high and have a span of about 800 feet.

The Winner Site would require a 34.5-kV to 115-kV collector substation(s) as well as a 115-kV transmission line to interconnect to Western's existing 115-kV Winner Substation. Other facilities necessary for this site would be similar to those described for the Crow Lake Site.

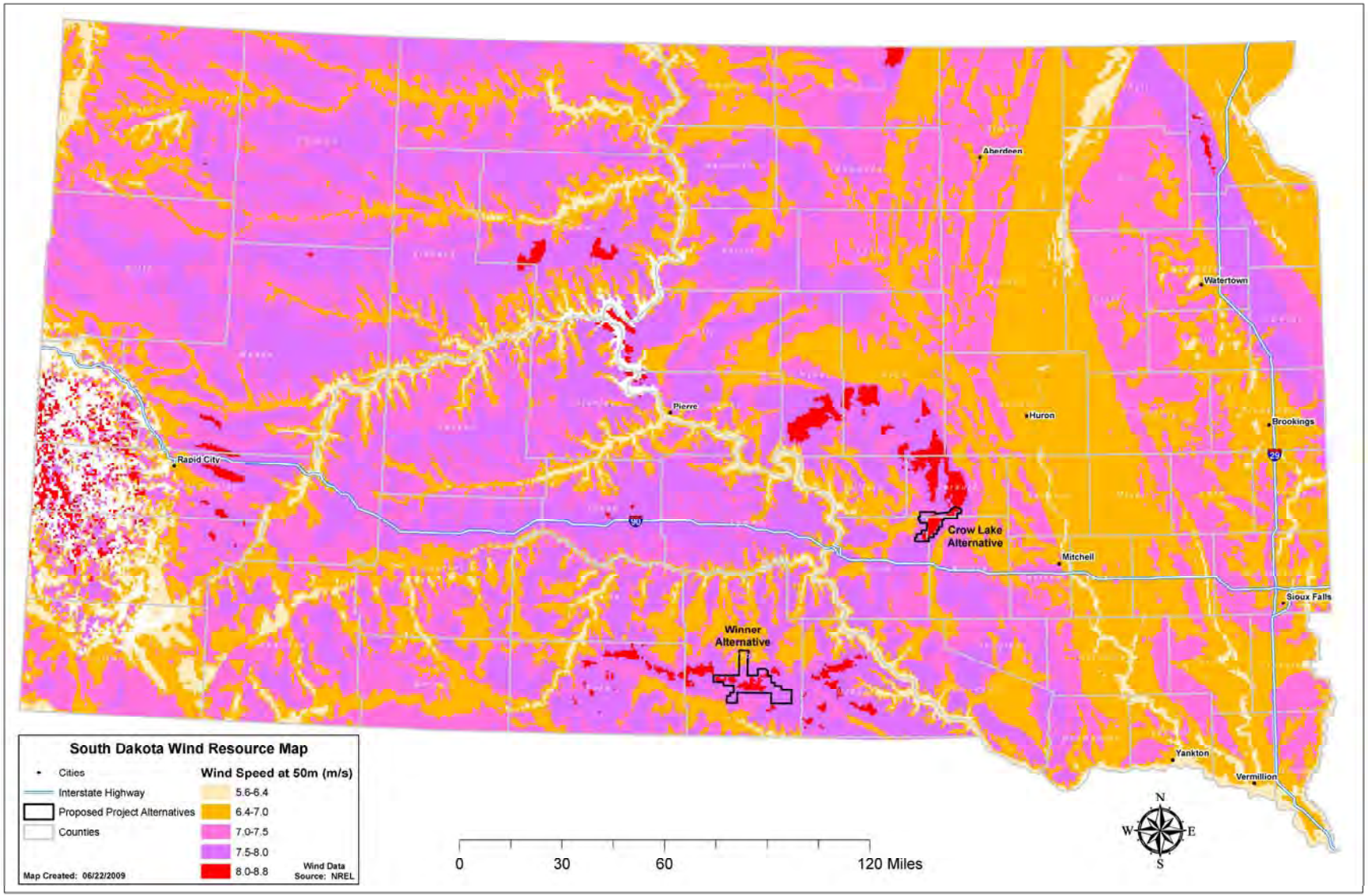

Figure 2-1 South Dakota Wind Resource Map

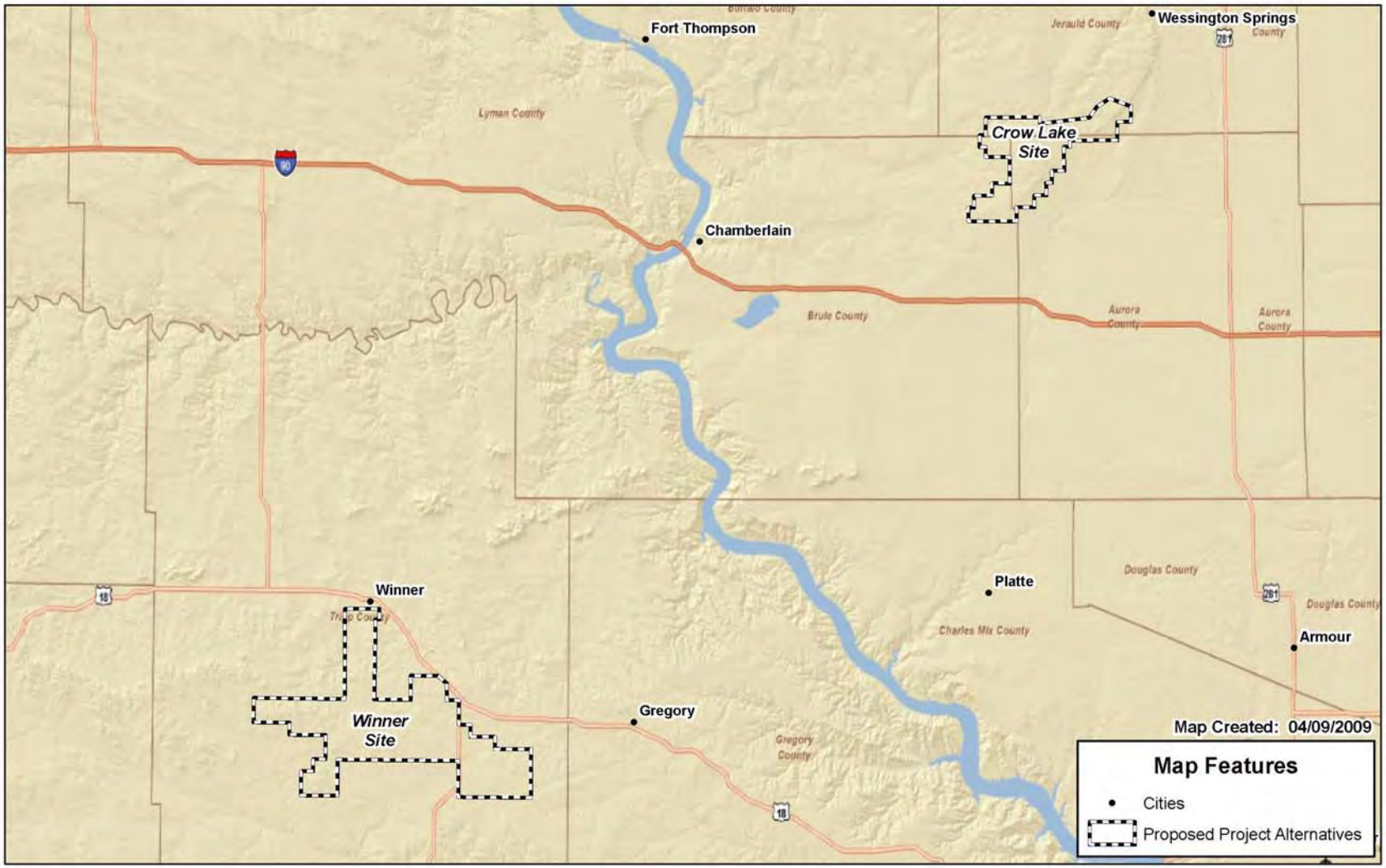

Figure 2-2 Proposed Project Alternative Sites

There is a chance that the final interconnection studies will conclude that other transmission facilities, such as network upgrades remote from the project site, would be required. If the project moves forward and it is determined that other facilities are needed to support the interconnection request, Western and RUS will complete the appropriate level of environmental review in accordance with regulatory requirements.

2.2 Agencies' Background, Proposed Actions and Applicants' Project Objectives

This section describes the background of each agency as well as the need for agency action and the Applicants' purpose and goals. It is noted that the proposed project is subject to the jurisdiction of the South Dakota Public Utilities Commission (SDPUC), which has regulatory authority for siting wind generation facilities and transmission lines within the state. PrairieWinds will submit an application for an Energy Conversion Facility Permit to the SDPUC. The SDPUC permit would be needed to authorize PrairieWinds to construct the proposed project under South Dakota rules and regulations.

Western and RUS are serving as co-lead Federal agencies, as defined at 40 CFR 1501.5, for preparation of the EIS. Native American Tribes and agencies with jurisdiction or special expertise have also been invited to be cooperating agencies, see **Section 3**, and **Appendices F** and **H** for the full lists.

Western and RUS intend to prepare the EIS to analyze the impacts of their respective Federal actions and the proposed project in accordance with NEPA, as amended, DOE NEPA Implementing Procedures (10 Code of Federal Regulation [CFR] 1021), the Council on Environmental Quality (CEQ) regulations for implementing NEPA (40 CFR 1500–1508), and RUS Environmental Policies and Procedures (7 CFR 1794). Western's action would be limited to the approval or denial of the interconnection request and any modifications to Western's power system necessary to accommodate the interconnection. RUS's Federal action would be limited to providing financial assistance for the proposed project. In addition, the EIS will also identify and address the environmental impacts of the proposed project. The EIS will evaluate in detail the two site alternatives, any other viable alternatives identified during the public scoping process, and the No Action Alternative.

2.2.1 Western's Interconnection Request

Western markets Federal hydroelectric power to preference customers, as specified by law. These customers include municipalities, cooperatives, public utilities, irrigation districts, Federal and State agencies, and Native American Tribes in 15 western states, including South Dakota. Western owns and operates about 17,000 miles of transmission lines.

Western's action is to grant or deny an interconnection request at its existing (Wessington Springs or Winner) substation. In granting or denying the application for interconnection, Western also needs to meet its obligations under applicable laws and regulations, including complying with the provisions of NEPA and other environmental requirements. Western's participation with the Applicants' proposed project is to be a co-lead agency for the EIS process

and provide oversight of the NEPA process and preparation of the EIS; as well as to consider approval of an interconnection request.

2.2.2 RUS's Financing Request

RUS, an agency that delivers the USDA's Rural Development Utilities Program, is authorized to make loans and loan guarantees that finance the construction of electric distribution, transmission, and generation facilities, including system improvements and replacements required to furnish and improve electric service in rural areas, as well as demand side management, energy conservation programs, and ongrid and off-grid renewable energy systems.

PrairieWinds has requested financial assistance for the proposed Project from RUS. RUS's Federal action is based on providing financial assistance; accordingly, completing the EIS is one requirement, along with other technical and financial considerations in processing PrairieWinds' application. In considering granting financing assistance for the proposed project, RUS also needs to meet its obligations under applicable laws and regulations, including complying with the provisions of NEPA and other environmental requirements. RUS's participation with the Applicant's proposed project is to be a co-lead agency for the EIS process and provide oversight of the NEPA process and preparation of the EIS; as well as to consider granting financing assistance.

2.2.3 Applicants

PrairieWinds, is a wholly owned subsidiary of Basin Electric. PrairieWinds proposes to construct, own, operate, and maintain the South Dakota PrairieWinds Project, a 150-MW wind-powered generation facility, including turbines, electrical collector lines, collector substation(s), transmission line, communications system, and service access roads to access wind-turbine sites.

Basin Electric is a consumer-owned, regional cooperative headquartered in Bismarck, North Dakota which services more than 120 member rural electric systems in nine states: Colorado, Iowa, Minnesota, Montana, Nebraska, New Mexico, North Dakota, South Dakota, and Wyoming. These member systems, in turn, distribute electricity to more than 2.6 million customers.

Public policy regarding the electric industry has increasingly focused on the carbon intensity of the resources commonly used to generate electricity. As a result, incentives and regulations to encourage or require the generation of power from renewable or low-environmental-impact resources are being actively considered and/or implemented within the Basin Electric member service areas. At the same time, a number of proposals for national Renewable Portfolio Standards (RPS) are pending in Congress. With members in nine states, Basin Electric recognizes the need for additional renewable energy capacity to service forecasted member load growth demands and to meet state mandated RPS. A wind project of up to 150-MW was determined to be the least-cost renewable resource option to satisfy future load and RPS requirements.

Basin Electric membership passed a resolution at their 2005 annual meeting that established a goal for Basin Electric to "obtain renewable or environmentally benign resources equal to 10% of the MW capacity needed to meet its member demand by 2010". This project would also provide opportunity for Basin Electric to meet that goal.

3.0 PUBLIC PARTICIPATION PROCESS

Western and RUS employed various methods to provide information to the public and solicit their input regarding the proposed project. Information was included in direct mailings that were sent to over 4,000 potentially interested persons in and near the proposed project areas. Venues for participation included two open house scoping meetings and one interagency meeting. In addition to accepting comments at meetings, Western and RUS invited interested individuals to submit their comments via U.S. Postal Service, fax, and/or email.

3.1 Scoping Process

The CEQ, DOE and RUS NEPA regulations define scoping as an early and open process for determining the scope of issues to be addressed in an EIS and for identifying the significant issues related to the proposed action. Western and RUS invited Federal, state, local, and tribal governments, the Applicants, and other interested persons and groups to participate in defining the scope of the EIS.

3.1.1 Notice of Intent

The "Notice of Intent to prepare an EIS and to conduct public scoping meetings; and notice of floodplains and wetland involvement" was published in the *Federal Register* (74 FR 15718) on April 7, 2009. The Notice of Intent (NOI) included information on the proposed project, times and locations for the April 28 and April 29 scoping meetings, and contact information for questions pertaining to the proposed project. A copy of the NOI is included in **Appendix C**.

3.1.2 Newspaper Notices

Notices announcing the public scoping meetings were published in *Indian Country Today*, *Mitchell Daily Republic*, *Plankinton South Dakota Mail*, and the *Winner Advocate*. *Indian Country Today* is a national, Native-American-interest publication, while the others are local newspapers. Publications in each newspaper provided information on the proposed project, scoping meeting information, and contact information for questions pertaining to the proposed project. The second notice publication in *Indian Country Today*, *Mitchell Daily Republic* and *Winner Advocate*, provided the same information as the initial announcements. Copies of the newspaper notices are provided in **Appendix D**.

The scoping meeting notice was published as follows:

- *Indian Country Today* – April 8 and 22, 2009
- *Mitchell Daily Republic* – April 8 and 22, 2009
- *Plankinton South Dakota Mail* – April 23, 2009
- *Winner Advocate* – April 8 and 22, 2009

3.1.3 Direct Mailings

In addition to the NOI, published in the *Federal Register* on April 7, 2009, Western and RUS mailed post card scoping notices and letters, which included the scoping meeting information, to over 4,000 potentially interested persons. The mailing list included Federal, state, and local agencies; elected officials; Native American tribes; members of the public; and addresses within 7 miles of the proposed project alternative sites.

The post card scoping notice was mailed on April 6, 2009. This post card mailing provided information on the proposed project; details for the April 28 and April 29, 2009, scoping meetings; and contact information for questions pertaining to the proposed project and/or the NEPA process. A copy of the post card scoping advertisement is included as **Appendix E**.

In addition to the post card scoping mailings, a letter was sent to more than 15 Native American tribes, (tribes, communities, and representative councils) on April 13, 2009, providing information on the proposed project, EIS scoping meeting details, and contact information for questions pertaining to the proposed project. The letter also served to initiate Government-to-Government consultation; and invited the tribes to participate in the reviews conducted under NEPA and section 106 of NHPA. A copy of the letter to the Native American tribes, and the mailing list is included in **Appendix F**.

3.1.4 Scoping Meetings

Two scoping meetings were hosted by Western and RUS during the public scoping process. The scoping meetings were held using an open house format to allow for an informal one-on-one exchange of information. Scoping meeting handouts included a copy of the *Federal Register* NOI, project fact sheet, scoping process information sheet, comment form, and a DOE NEPA brochure. Large-scale aerial photographs illustrating the Applicants' proposed project alternative sites were presented to help facilitate identification of issues and alternatives. Additional large-scale poster boards included: a South Dakota wind resource map; an EIS process and timeline graphic; Western and RUS Federal Action boards; and turbine and transmission line siting parameters. A station was set up at the meetings with a looping PowerPoint presentation to provide an opportunity for individuals to sit and view proposed project information and follow along with a print out of the presentation slides. The same information was available at each meeting. All information presented at the meetings is available on the project website: http://www.wapa.gov/transmission/sdprairiewinds.htm. Copies of the handouts and boards available at the scoping meetings and the sign-in sheets are included in **Appendix G**.

Table 3-1 lists the scoping meeting locations, dates, times, and attendance.

Table 3-1 Public Scoping Meetings

Location	Date	Time	Attendance
Winner, SD	April 28, 2009	4 - 7 p.m.	88
Plankinton, SD	April 29, 2009	4 - 7 p.m.	81
Total			**169**

3.2 Interagency Coordination

3.2.1 Interagency Meeting

A letter was sent on April 9, 2009, to invite Federal, state and local agencies to participate in an interagency meeting for the EIS. In addition, agencies with jurisdiction or special expertise were also requested to be cooperating agencies for the proposed project. One copy of the interagency meeting invitation letter, one copy of the interagency meeting and request to be a cooperating agency invitation letter, and the full list of invitees are included in **Appendix H.**

On April 28, 2009, Western and RUS hosted an interagency meeting at the Best Western Ramkota Hotel, in Pierre, South Dakota, from 9 a.m. to 11 a.m. Project specific information was presented at the meeting. The following list summarizes the agencies represented at the interagency meeting (in alphabetical order):

- Aurora County Weed Supervisor
- Bureau of Indian Affairs (BIA)
- Intertribal Council on Utility Policy (Intertribal COUP)
- Mayor of Wessington Springs, South Dakota
- South Dakota Aeronautics Commission
- South Dakota Department of Environment and Natural Resources
- South Dakota Game, Fish, and Parks (SDGFP)
- South Dakota Governor's Office
- SDPUC
- SHPO
- South Dakota State Land Department
- U.S. Army Corps of Engineers (USACE)
- USFWS
- Wessington Springs Area Development Corporation

3.2.2 Cooperating Agencies

Currently, Wessington Springs Area Development Corporation and USFWS Refuge Division are the only agencies that have expressed interest in participating as a cooperating agency. Wessington Springs Area Development Corporation is a non-profit non-governmental organization and will participate as an interested party as prescribed in the CEQ Memorandum for the Heads of Federal Agencies (CEQ 2002). As of May13, 2009, the USFWS has formally accepted the invitation to participate as a cooperating agency. All agencies, regardless of cooperating agency status, will be kept informed of the proposed project and receive updates as they become available.

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4.0 COMMENT SUMMARY

A summary of the written comments received and issues identified through May 15, 2009, is included in **Table 4-1** (similar items have been grouped together). Copies of the comments received (letters, comment forms etc.) are included in **Appendix I**. Overall, 16 comment forms were received during the scoping and interagency meetings, 46 comment forms/letters were mailed in, 14 comments were e-mailed to the project e-mail address, and 1 faxed comment was received.

Additional discussion items were noted during the interagency meeting and from calls received on the project hotline. Those discussion items are summarized in the lists below (similar items have been grouped together).

Discussion items noted during the interagency meeting:

- The South Dakota State Transportation Department representative asked how Basin Electric complies with FAA lighting requirements for turbines, transmission lines, and meteorological towers.
- The BIA representative asked about the buffer considered in analysis of cultural resources. He also expressed concern with inanimate objects in traditional cultural practice areas and how turbine towers are lit at night.
- The USACE representative asked about substation(s) specifics, accommodations for administration facilities, and hydrological permits and considerations, considered with the proposed project.
- The SHPO representative expressed concern with indirect effects of the proposed project.
- The Wessington Springs Mayor asked about the analysis for the proposed project and if biological data retrieved from the Wessington Springs Wind Project could be used.
- The County weed supervisor asked who is responsible for reclamation of lands for noxious weeds after construction.
- The Wessington Springs Area Development Corporation representative asked whether sensitive species were found during the biological analysis for the Wessington Springs project; and whether Whooping crane stopover occurrences were recorded in that project's analysis. He also inquired about existing infrastructure and energy storage capabilities.
- The South Dakota Department of Environment and Natural Resources representative asked about specific noise information in relation to the turbines when they are in operation and rotation speeds.
- The SDGFP representative noted that the agency would prefer the proposed project to use the northern half of the Winner study area over the southern half. Additional discussion on this preference included: the northern portion has more agriculture and fewer large tracts of "native" prairie or grassland; and the southern portion has two state wildlife areas that attract waterfowl.
- The USFWS representative inquired about turbine blade rotation speeds and statistics on the number of bird collisions.
- There was also additional discussion regarding burying beetle habitat and nesting birds.

Discussion items noted from the project hotline:

- Proposed project schedule
- Connection to Prelude or TransCanada potential projects
- Radio interview request
- Individual from the Rosebud Sioux Tribe commented on another potentially developing project; informed that comments will be provided
- Alternative day for scoping meeting requested
- Individual did not provide comment, but called Project Hotline
- Land offered for wind development
- Transmission infrastructure upgrades
- Requests to be kept informed of the proposed project developments and be added to mail/e-mail lists
- Representative from South Dakota School and Public Lands Office requested proposed project alternative sites maps
- Interest in energy capacity for the proposed project; as well as tribal consultation
- Interest in contract with Basin Electric
- Request for legal description and GIS shapefiles of proposed project
- Request for project information; and for both alternatives to be evaluated equally
- Information on scoping meeting details
- Request information on Basin Electric's members
- Request information on Programmatic Wind EIS, and additional wind energy generation projects

Table 4-1 Scoping Period Comment Summary

Issue	Comment	Treatment / Response	Form of Comment/ Commenter
Air Quality	Protection of air quality should be addressed.	Comment will be addressed in the EIS.	Mailed comment form Environmental Protection Agency (EPA) Region 8
	Dust particulates from construction and on-going project activities are a concern; EIS should include dust control methods.	Comment will be addressed in the EIS.	Mailed comment form EPA Region 8
Alternatives	Preference for the proposed Crow Lake Site to be approved for the Proposed Project.	Comment noted.	Scoping meeting comment form D. Weiland; Mailed comment forms D. Thomas, R. Meier, C. Brown; E-mailed comment D. Scherschligt
	Preference for Crow Lake Site to be approved for the Proposed Project; also noted that site may cost less to build due to smaller acreage, and have higher wind potential.	Comment noted.	Mailed comment form G. Higgins
	Map request of the Crow lake Site.	Map was provided.	Scoping meeting comment form M. Heisinger
	Summarize criteria and process used to develop Proposed Project alternative sites, disclose reasoning used to eliminate alternatives.	Comment will be addressed in the EIS.	Mailed comment form EPA Region 8
	Proposed Project alternatives map request.	Map was provided.	E-mailed comment M. Cornelison, Van Genderen
Aviation Safety	Request for all project turbines to be lit at night as mitigation.	Comment will be addressed in the EIS.	Mailed comment form J. Clements, V. Vanderhule, L. Nelson, R. Pearson; E-mailed Comment J. Mitchell
Biological Resources	USFWS formally accepted invitation to participate as a cooperating agency.	Cooperating Agency status confirmed.	Mailed comment form USFWS
	USFWS provided a list of federally-protected species that may occur in the project area(s).	Species impact analysis will be provided in the EIS.	Mailed comment form USFWS

Table 4-1 Scoping Period Comment Summary

Issue	Comment	Treatment / Response	Form of Comment/ Commenter
Biological Resources, *(continued)*	USFWS provided wind turbine guidelines and considerations with meteorological towers and power lines with respect to sensitive species.	Comment will be addressed in the EIS.	Mailed comment form USFWS
	USFWS provided discussion on wind energy and wildlife.	Comment noted.	Mailed comment form USFWS
	USFWS provided information on avian and bat protection plans, including the Migratory Bird Treaty Act (16 U.S.C. 703-712), or Bald and Golden Eagle Protection Act of 1940 (16 U.S.C. 668-668d, 54 Stat. 250), and information on birds of conservation concern, and U.S. Geological Survey avian research.	Avian and bat impact analysis will be provided in the EIS.	Mailed comment form USFWS
	SDGFP support development of alternative sources of energy.	Comment noted.	Mailed comment form SDGFP
	SDGFP suggested to consider impacts including mortality from turbine strikes, habitat alteration, and behavior modification from improperly sited wind power projects.	Avian and bat impact analysis will be provided in the EIS.	Mailed comment form SDGFP
	SDGFP noted previous correspondence with project representatives and information provided including SDGFP Natural Heritage Program data and information on unique and/or special resources or areas in the Proposed Project areas.	Comment noted; species impact analysis will be provided in the EIS.	Mailed comment form SDGFP
	Identify endangered species potentially affected by the project.	Endangered species impact analysis to be included in the EIS.	Scoping meeting comment form M. LaPointe
	Disclose and evaluate effects of project activities on area ecology, vegetation, and wildlife and habitats.	Comment will be addressed in the EIS.	Mailed comment form EPA Region 8
	Identify critical habitat and impacts on species and critical habitat.	Comment will be addressed in the EIS.	Mailed comment form EPA Region 8
	Describe how project will meet ESA requirements.	Comment will be addressed in the EIS.	Mailed comment form EPA Region 8

Table 4-1 Scoping Period Comment Summary

Issue	Comment	Treatment / Response	Form of Comment/ Commenter
Biological Resources, *(continued)*	Analyze migration corridors and flyways.	Comment will be addressed in the EIS.	Mailed comment form EPA Region 8
	Disclose potential toxic hazards associated with pesticide or herbicide use.	Comment will be addressed in the EIS.	Mailed comment form EPA Region 8
Cultural Resources	Identify potential cultural impacts.	Follow-up discussion with the commenter was conducted by project representatives. Comment will also be addressed in the EIS.	Scoping meeting comment form M. LaPointe
Cumulative Impacts	EIS should examine cumulative impacts, including direct and indirect effects, including past, present, and reasonably foreseeable future activities.	Comment will be addressed in the EIS.	Mailed comment form EPA Region 8
Environmental Justice	Include potential impacts on low income, minority, and/or tribal communities.	Comment will be addressed in the EIS.	Mailed comment form EPA Region 8
Greenhouse Gases and Climate Change	The EIS should include an estimate of annual greenhouse gas emissions expected during operations and describe the emissions in terms of carbon dioxide equivalents in metric tons per year per megawatt hour produced; then compare to regional or state estimated emissions.	Comment will be addressed in the EIS.	Mailed comment form EPA Region 8
NEPA Process	Request that the environmental process be expedited.	Comment noted.	Scoping meeting comment form G. Arnott (Wessington Springs Area Development Corporation)
	National energy policies and national security in general are impacted by excessive oil import.	Comment noted.	Scoping meeting comment form G. Arnott (Wessington Springs Area Development Corporation)
	Commented that wind and other renewable are time sensitive, and should be implemented more quickly.	Comment noted.	Scoping meeting comment form G. Arnott (Wessington Springs Area Development Corporation)

Table 4-1 Scoping Period Comment Summary

Issue	Comment	Treatment / Response	Form of Comment/ Commenter
NEPA Process, *continued*	Support for wind energy development; noted that USFWS is an impediment to wind development; compliance with the USFWS approval process is a moving target and should be more easily acquired for wind energy projects.	Comment noted.	Interagency meeting comment form J. Burg (Wessington Springs Mayor)
	Request to be added to project mailing list.	Information added to mailing list.	Scoping meeting comment forms G. and V. Hoing, G. Brodkorb, G. Higgins; Mailed comment forms K. Perrin, J. and A. Bennett, M. Schochenmaier, Cernys, J. Peters, B. Brozik, B. Lindbloom, D. Vaughn, M. Moerike, D. Moerike, Kayls, William, R. Kreinbuhl, E. Odenbach, V. Svoboda, K. Kreinbuhl, P. Licht, E-mailed comment C. Loop
	Welcomed project representatives to the Town of White Lake.	Comment noted.	Scoping meeting comment form S. Bradwisch
	Provided encouragement for the project to move forward.	Comment noted.	Mailed comment forms D.Stukel, R. DeMers, Wilhelmsens
	Representative from KWYR requested radio interview.	Follow-up discussion with the commenter was conducted by project representative.	E-mailed comment KWYR
Out of Scope	Other developers have prompted individuals to sign land agreements. Commenter requested clarification on right-of-way details and easement compliance, requested information on land agreement expirations and payment guarantees.	Applicant to address.	Scoping comment form J. Patmore

Table 4-1 Scoping Period Comment Summary

Issue	Comment	Treatment / Response	Form of Comment/ Commenter
Out of Scope, *continued*	Encouraged upgrading of transmission lines through the areas to provide power access for other wind farm projects interested in the area.	Comment noted; the project as proposed is to build a wind-powered electric generation facility in central South Dakota, as such this comment is beyond the scope of this EIS.	Scoping meeting comment form J. Keierleber, E-mailed comment D. and J. Assmans
	Request for transmission line upgrades in Gregory County to support wind energy development.	Comment noted; the project as proposed is to build a wind-powered electric generation facility in central South Dakota (not located within Gregory County), as such this comment is beyond the scope of this EIS.	Mailed comment forms D. Deffenbaugh, R. Hartog, Janouseks, J. Waterbury, Petersens, H. Winter, E. Brumbaugh, R. Shaffer, E. Dostal
	Interest in supplying services/facilities during construction of the project.	Comment noted; information provided to Applicant.	Scoping meeting comment form H. Hotchkiss; E-mailed comment J. Herrera
	Volunteered land for wind turbine development.	Comment noted; information provided to Applicant.	Scoping meeting comment form F. Woods
	Supports Proposed Project, and suggests improving local transmission infrastructure.	Comment noted. The project as proposed is to build a wind-powered electric generation facility in central South Dakota; as such this comment is beyond the scope of this EIS.	Faxed comment form R. Gillen
Project Description	Request for information on the size, and height of the wind testers, number of testing sites in the study areas, acres of study areas, size and MW of proposed substation(s).	Much of this information was available in the scoping meeting materials and on the project website. Follow-up discussion with the commenter was conducted by project representatives. Comment will also be addressed in the EIS.	Scoping meeting comment form M. LaPointe

Table 4-1 Scoping Period Comment Summary

Issue	Comment	Treatment / Response	Form of Comment/ Commenter
Project Description, *(continued)*	Include construction, design, and operation practices that will be incorporated to protect water quality from erosion.	Comment will be addressed in the EIS.	Mailed comment form EPA Region 8
	Inquired about the substation(s) component of the Proposed Project.	Comment noted. Substation(s) information can also be found in the NOI and will be included in the EIS provided.	Mailed comment form D. Salmen
Scoping	Welcomed the Proposed Project and was pleased with the presentation during the meetings.	Comment noted.	Scoping meeting comment form P. Seppanen
	Request project information.	Follow-up e-mail provided project information.	Mailed comment form R. Kovacevich
	Support for the Proposed Project, and would have preferred a formal presentation during the scoping meeting.	Comment noted; follow-up phone call with the commenter was conducted by project representatives.	Mailed comment form D. Salmen
	Bureau of Land Management (BLM) appreciates the opportunity to review and provide comments on the project, but that the agency does not have expertise of information relevant to the project.	Comment noted.	Mailed comment form BLM
	Appreciated the meeting, found it interesting.	Comment noted.	Mailed comment form B. Kroupa
	South Dakota Mail representative requested scoping meeting notice to be included in the local newspaper.	Comment noted and notice was included in *South Dakota Mail*.	E-mailed comment Plankinton Newspaper
	Request information regarding the scoping meetings.	Comment noted, information provided.	E-mailed comment Donna, J. Keierleber, T. Klein
Section 106 Process	Are government agencies participating in Government-to-Government discussions with local Native American Tribes?	Follow-up discussion with the commenter was conducted by project representatives. Comment noted, the lead agencies have initiated the Government-to-Government consultations.	Scoping meeting comment form M. LaPointe

Table 4-1 Scoping Period Comment Summary

Issue	Comment	Treatment / Response	Form of Comment/ Commenter
Section 106 Process, *(continued)*	Concern about notification to tribes regarding the scoping meetings.	Tribes were notified of the EIS scoping meetings in a letter dated April 13, 2009; Government-to-Government consultation will continue through the section 106 process; tribal meetings will occur in June 2009.	Mailed comment form Intertribal Council on Utility Policy (COUP)
	Northern Arapahoe Tribal Consultants offered archaeological services for the Proposed Project EIS analysis and section 106.	Comment noted.	E-mailed comment Y. Wolf
Visual Resources	Provided information on the Lewis and Clark National Historic Trail; requested that the EIS include analysis of the potential visual resource effects for both the Proposed Project alternative sites in regards to the Trail.	Comment will be addressed in the EIS.	E-mailed comment National Park Service
Water Resources	Clearly describe water bodies within the analysis area which may be impacted by project activities; analysis of area's geology, topography, soils and stream stability may be necessary.	Comment will be addressed in the EIS.	Mailed comment form EPA Region 8
	Provide information on Clean Water Act (CWA) section 303(d) impaired waters in project area, if any.	Comment will be addressed in the EIS.	Mailed comment form EPA Region 8
Wetlands / Riparian Areas	Identify potential wetlands both jurisdictional and non-jurisdictional, potential impacts, and least damaging practicable alternative for avoiding wetlands.	Comment will be addressed in the EIS.	Mailed comment form EPA Region 8

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Appendix A

EIS Determination

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Department of Energy
Western Area Power Administration
P.O. Box 281213
Lakewood, CO 80228-8213

MEMORANDUM FOR CAROL M. BORGSTROM, GC-20
DIRECTOR, OFFICE OF NEPA POLICY AND COMPLIANCE

FROM: TIMOTHY J. MEEKS
ADMINISTRATOR

SUBJECT: Environmental Impact Statement Determination for South Dakota PrairieWinds Project

In accordance with my responsibilities under section 5.a.(8) of the Department of Energy (DOE) Order 451.1B, National Environmental Policy Act Compliance Program, I have determined that the subject proposal will require the preparation of an environmental impact statement (EIS). Basin Electric Power Cooperative (Basin Electric) proposes to interconnect a 151.5-megawatt (MW) nameplate capacity wind power generating station to Western Area Power Administration's (Western) transmission system at either its Wessington Springs Substation in Jerauld County, South Dakota or its Winner Substation in Tripp County, South Dakota.

Western's proposed Federal action is to consider Basin Electric's interconnection request under Western's Open Access Transmission Service Tariff and make a decision whether to approve or deny the interconnection request. If the decision is to approve the request, Western's action will include making necessary system modifications to accommodate the interconnection of Basin Electric's proposed project.

PrairieWinds, SD1, Incorporated (PrairieWinds), a wholly owned subsidiary of Basin Electric, proposes to construct, own, operate, and maintain the South Dakota PrairieWinds Project (Project). The Project includes a 151.5-MW nameplate capacity wind generation facility, which would consist of wind turbines, electrical collector systems, collector substation(s), transmission line(s), a communication network, and service roads to access the turbine sites. The proposed Project would be located in portions of Brule, Aurora, and Jerauld counties or in Tripp County, South Dakota.

PrairieWinds has requested financial assistance for the proposed Project from the U.S. Department of Agriculture, Rural Utilities Service (RUS). RUS' proposed Federal action is whether or not to provide financial assistance; accordingly, completing the EIS is one requirement along with other technical and financial considerations in processing PrairieWinds' application. RUS will serve as a co-lead agency with Western in the preparation of the EIS. Other agencies will be invited to participate as cooperating agencies.

While Western's proposed Federal action will be limited to the approval or denial of the interconnection request, and any system modifications Western might need to make to accommodate the interconnection, the EIS will identify and review the environmental impacts of

PrairieWinds' proposed Project. The proposed Project is subject to the jurisdiction of the South Dakota Public Utilities Commission (SDPUC). PrairieWinds will submit an application for an Energy Conversion Facility Permit to the SDPUC. The SDPUC permit would authorize construction of the proposed Project under South Dakota rules and regulations.

Appendix D of Section 1021.400 (subpart D) of the DOE NEPA implementing procedures lists classes of action that normally require the preparation of an EIS. Specifically, provision D6 under Appendix D is applicable: "Integrating transmission facilities (that is, transmission system additions for integrating major new sources of generation into a Power Marketing Administration's main grid)." The 151.5-MW nameplate capacity proposed Project exceeds the 50 average MW threshold for a major new generation resource defined in the DOE NEPA implementing procedures.

Based on the provisions in 10 CFR Part 1021.400(a)(3) and (c) of the DOE NEPA implementing procedures, and since the proposed action would involve the integration of a major new source of generation into Western's power system, I have determined that an EIS is required for the interconnection of the South Dakota PrairieWinds Project. Please assign a DOE EIS number for this project. Ms. Liana Reilly will be the NEPA Document Manager for the EIS. She may be reached at (720) 962-7253 or reilly@wapa.gov.

cc:
Dennis Rankin, Project Manager
Engineering and Environmental Staff
Rural Utilities Service
Utilities Program
1400 Independence Ave. SW, Mail Stop 1571
Washington, D.C. 20250-1571

Yardena M. Mansoor, Environmental Protection Specialist, Office of NEPA Policy and Compliance, GC-20, Washington, D.C.
bcc:
A7400 (RF, Blevins, Reilly, Swanson)
N. Stas, B0400.BL, Billings, MT
R. O'Sullivan, B0404.BL, Billings, MT

A7400:LReilly:lou:x7448:3/16/09:SDPrairieWindsBorgstromEISDetermination

Appendix B

Proposed Project Alternatives Site Maps

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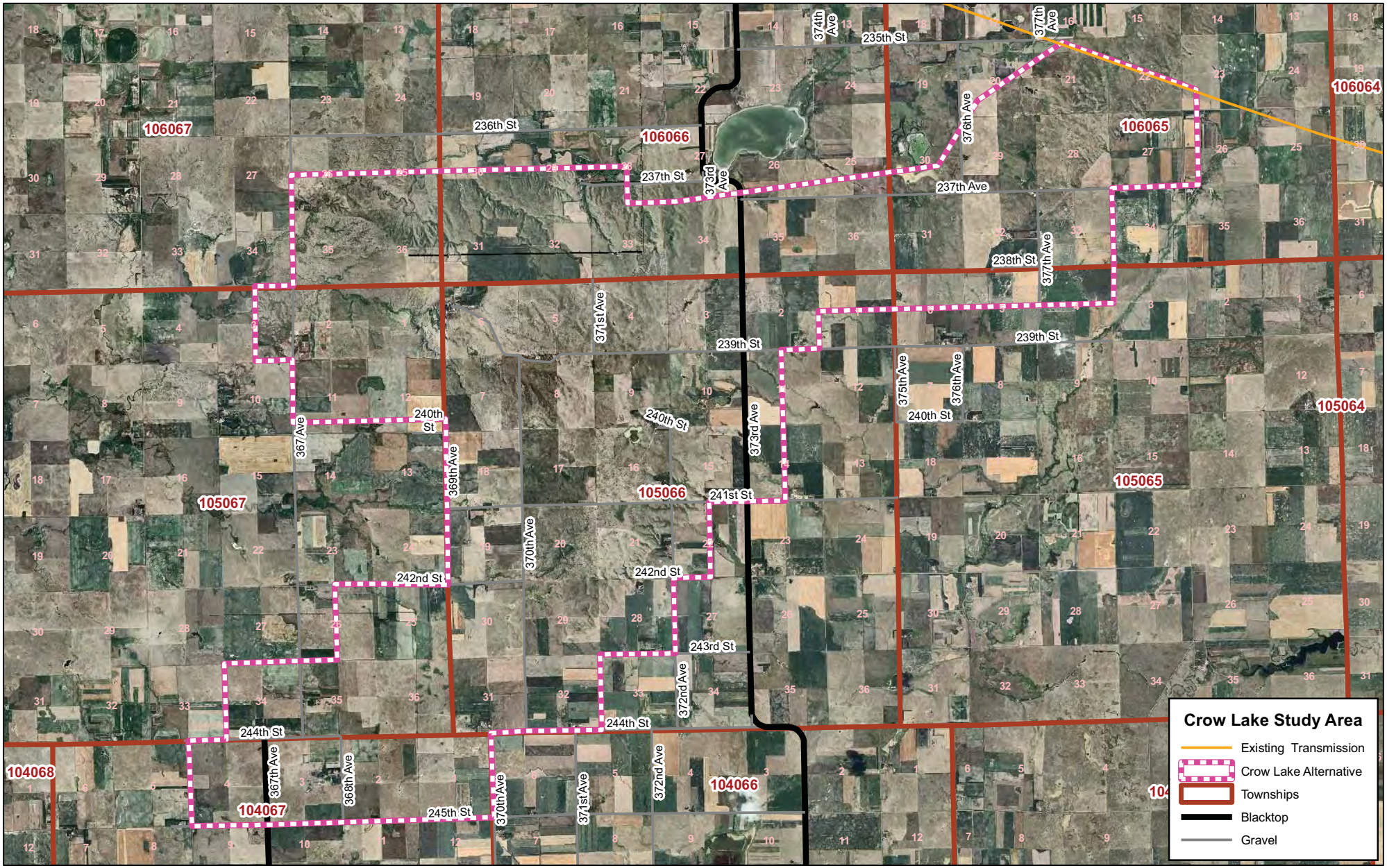
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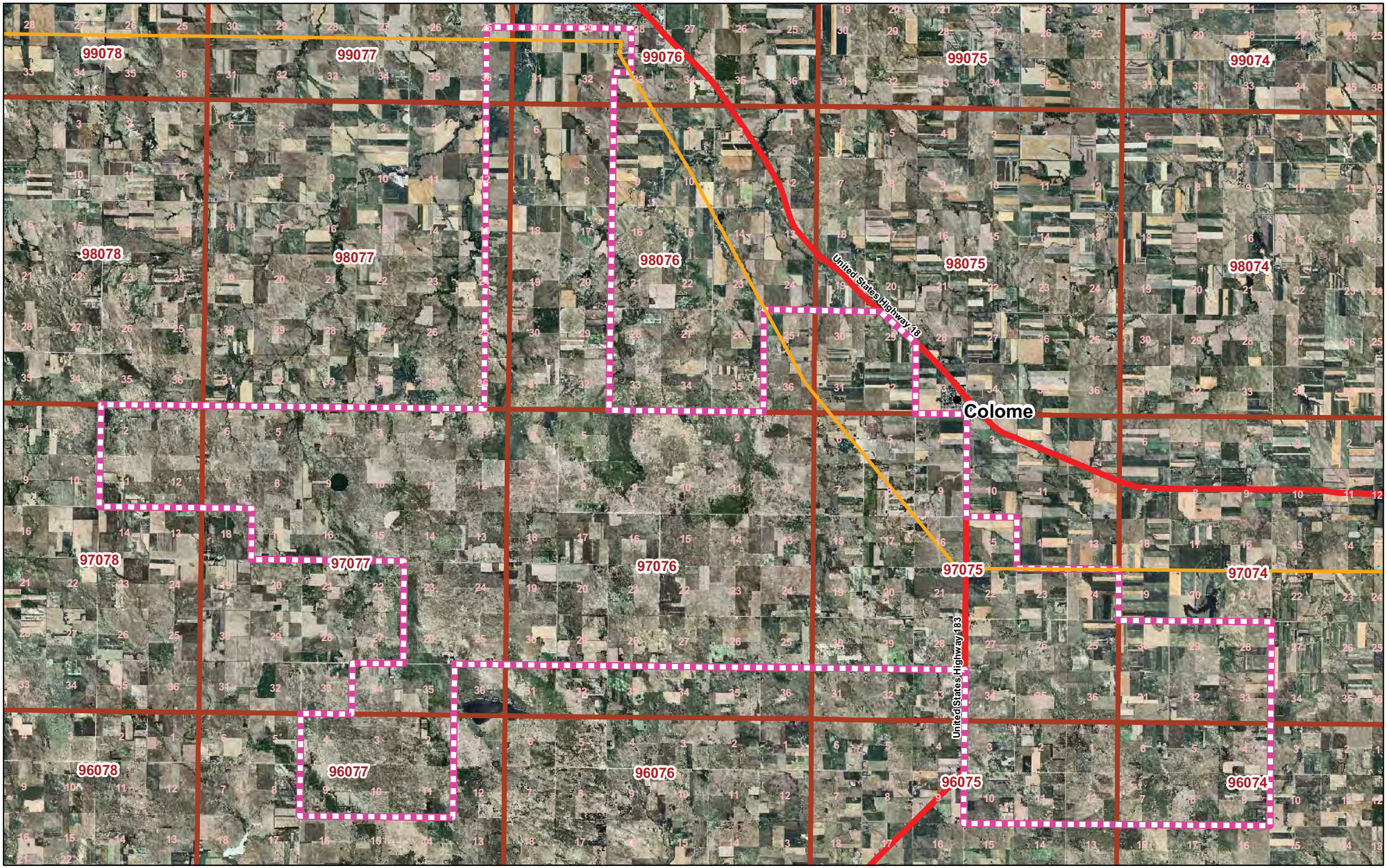
Crow Lake Alternative
Townships
Blacktop
Gravel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Appendix C

Notice of Intent

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Web site at *http://www.ferc.gov/docs-filing/elibrary.asp*. Enter the docket number (P–13357) in the docket number field to access the document. For assistance, call toll-free 1–866–208–3372.

Kimberly D. Bose,

Secretary.

[FR Doc. E9–7768 Filed 4–6–09; 8:45 am]

BILLING CODE 6717–01–P

DEPARTMENT OF ENERGY

Western Area Power Administration

DEPARTMENT OF AGRICULTURE

Rural Utility Service

Proposed PrairieWinds Project, South Dakota

AGENCIES: Western Area Power Administration, U.S. Department of Energy; Rural Utilities Service, U.S. Department of Agriculture.

ACTION: Notice of Intent to Prepare an Environmental Impact Statement and to Conduct Scoping Meetings; Notice of Floodplain and Wetlands Involvement.

SUMMARY: The Western Area Power Administration (Western), an agency within the U.S. Department of Energy (DOE), and Rural Utilities Service (RUS), an agency within the U.S. Department of Agriculture (USDA), intend to jointly prepare an environmental impact statement (EIS) for the proposed PrairieWinds Project (Project) in South Dakota. Western is issuing this Notice of Intent (NOI) to inform the public and interested parties about the proposed Project, conduct a public scoping process, and invite the public to comment on the scope, proposed action, alternatives, and other issues to be addressed in the EIS.

The EIS will address the construction, maintenance and operation of the proposed Project, which would include a 151.5-megawatt (MW) nameplate capacity wind-powered generating facility consisting of wind turbine generators, electrical collector lines, collector substation(s), transmission line(s), communications system, and service roads to access wind turbine sites. The EIS will also address the proposed interconnection with existing Western substations. The proposed Project would be located within portions of Brule, Aurora, and Jerauld counties, South Dakota or entirely within Tripp County, South Dakota.

Portions of the proposed Project may affect floodplains and wetlands, so this NOI also serves as a notice of proposed floodplain or wetland action. Western and RUS will hold public scoping meetings near the proposed Project areas to share information and receive comments and suggestions on the scope of the EIS.

DATES: Open house public scoping meetings will be held on April 28, 2009, at the Holiday Inn Express and Suites, 1360 East Highway 44, Winner, South Dakota, 57580, from 4 p.m. to 7 p.m. CDT; and on April 29, 2009, at the Commerce Street Grille, 118 N. Main Street, Plankinton, South Dakota, 57368, from 4 p.m. to 7 p.m. CDT. The public scoping period starts with the publication of this notice in the **Federal Register** and will continue through May 15, 2009. To help define the scope of the EIS, written comments should be submitted through the project's Web address: *http://www.wapa.gov/sdprairiewinds.htm*, or sent by letter, fax, or e-mail no later than May 15, 2009.

ADDRESSES: Written comments on the scope of the EIS should be addressed to Ms. Liana Reilly, Document Manager, Western Area Power Administration, Corporate Services Office, A7400, P.O. Box 281213, Lakewood, Colorado 80228–8213, fax (720) 962–7263, or sent by e-mail to *sdprairiewinds@wapa.gov*. Comments may also be submitted through the project's Web address: *http://www.wapa.gov/sdprairiewinds.htm*.

FOR FURTHER INFORMATION CONTACT: For information on the proposed Project, the EIS process, and general information about interconnections with Western's transmission system, contact Ms. Reilly at (800) 336–7288 or the address provided above. Parties wishing to be placed on the Project mailing list for future information, and to receive copies of the Draft and Final EIS when they are available, should also contact Ms. Reilly.

For information on RUS financing, contact Mr. Dennis Rankin, Project Manager, Engineering and Environmental Staff, Rural Utilities Service, Utilities Program, 1400 Independence Avenue, SW., Mail Stop 1571, Washington, DC 20250–1571, telephone (202) 720–1953 or e-mail *dennis.rankin@wdc.usda.gov*.

For general information on DOE National Environmental Policy Act (NEPA), 42 U.S.C. 4321–4347 review procedures or status of a NEPA review, contact Ms. Carol M. Borgstrom, Director of NEPA Policy and Compliance, GC–20, U.S. Department of Energy, 1000 Independence Avenue, SW., Washington, DC 20585, telephone (202) 586–4600 or (800) 472–2756.

SUPPLEMENTARY INFORMATION: Western, an agency within DOE, markets Federal hydroelectric power to preference customers, as specified by law. These customers include municipalities, cooperatives, public utilities, irrigation districts, Federal and State agencies, and Native American Tribes in 15 western states, including South Dakota. Western owns and operates about 17,000 miles of transmission lines.

RUS, an agency that delivers the USDA's Rural Development Utilities Program, is authorized to make loans and loan guarantees that finance the construction of electric distribution, transmission, and generation facilities, including system improvements and replacements required to furnish and improve electric service in rural areas, as well as demand side management, energy conservation programs, and on-grid and off-grid renewable energy systems.

Basin Electric is a regional wholesale electric generation and transmission cooperative owned and controlled by its member cooperatives. Basin Electric serves approximately 2.5 million customers covering 430,000 square miles in portions of nine states, including Colorado, Iowa, Minnesota, Montana, Nebraska, New Mexico, North Dakota, South Dakota, and Wyoming.

PrairieWinds, SD1, Incorporated (PrairieWinds), is a wholly owned subsidiary of Basin Electric.

Project Description

PrairieWinds proposes to construct, own, operate, and maintain the South Dakota PrairieWinds Project, a 151.5–MW nameplate capacity wind-powered generation facility, including wind-turbine generators, electrical collector lines, collector substation(s), transmission line, communications system, and service access roads to access wind-turbine sites.

There are two possible locations for the proposed Project. One site is located on about 37,000 acres about 15 miles north of White Lake, South Dakota, within Brule, Aurora, and Jerauld counties, South Dakota. For this alternative, the requested interconnection is with Western's electric transmission system at Wessington Springs Substation, located in Jerauld County, South Dakota. The other site is located on about 83,000 acres about 8 miles south of Winner, South Dakota, entirely within Tripp County, South Dakota. If this alternative is selected, the interconnection request will be with Western's electric transmission system at Winner Substation, located in Tripp County.

The proposed Project is subject to the jurisdiction of the South Dakota Public Utilities Commission (SDPUC), which has regulatory authority for siting wind generation facilities and transmission lines within the State. PrairieWinds will submit an application for an Energy Conversion Facility Permit to the SDPUC. The SDPUC permit would authorize PrairieWinds to construct the proposed Project under South Dakota rules and regulations. Western's Federal action is to consider Basin Electric's interconnection request under Western's Open Access Transmission Service Tariff and make a decision whether to approve or deny the interconnection request. If the decision is to approve the request, Western's action would include making necessary system modifications to accommodate the interconnection of the proposed Project. PrairieWinds has requested financial assistance for the proposed Project from RUS. RUS' Federal action is whether to provide financial assistance; accordingly, completing the EIS is one requirement, along with other technical and financial considerations in processing PrairieWind's application.

Western and RUS intend to prepare an EIS to analyze the impacts of their respective Federal actions and the proposed Project in accordance with NEPA, as amended, DOE NEPA Implementing Procedures (10 CFR 1021), the CEQ regulations for implementing NEPA (40 CFR 1500–1508), and RUS Environmental Policies and Procedures (7 CFR 1794). While Western's and RUS' Federal actions would be limited to the approval or denial of the interconnection request, any modifications to Western's power system necessary to accommodate the interconnection, and providing financial assistance for the proposed Project, the EIS will also identify and address the environmental impacts of the proposed Project. The EIS will evaluate in detail the two alternatives, any other viable alternatives identified during the public scoping process, and the No Action Alternative.

Regardless of the site selected, the proposed Project would consist of four main facilities: Turbines, collector system, roads, and transmission lines. PrairieWinds plans to install 101 General Electric 1.5–MW wind turbines for the proposed Project within one of the alternative generation sites. Fifteen additional turbines may be installed within the selected site, pending future load, transmission availability, and renewable production standard requirements. Each generator would have a hub height of 262 feet and a turbine rotor diameter of 252 feet. The total height of each wind turbine would be 389 feet with a blade in the vertical position. The towers would be constructed of tubular steel, approximately 15 feet in diameter at the base, with internal joint flanges. The color of the towers and rotors would be standard white or off-white. During construction, a work/staging area at each turbine would include the crane pad and rotor assembly area. This area would measure about 190 feet by 210 feet. The turbine foundations would typically be mat foundations (inverted T-foundations) or a concentric-ring-shell foundation. The area excavated for the turbine foundations would typically be no more than 70 feet by 70 feet (approximately 0.1 acre). Pad mounted transformers 74 inches by 92 inches by 70 inches would be placed next to each turbine. In some cases, for step-and-touch voltage compliance, an area around a turbine may be covered in 4 inches of gravel, river rock or crushed stone.

Each wind turbine would be interconnected with underground power and communications cables, identified as the collector system. This system would be used to route the power from each turbine to a central collector substation(s) where the electrical voltage would be stepped up from 34.5 kilovolt (kV) to 230-kV. The collector substation(s) would be enclosed in a fence with dimensions about 350 feet by 140 feet. The underground collector system would be placed in one trench or two parallel trenches and connect each of the turbines to a central collector substation. The estimated trench length, including parallel trenches, is 317,000 feet (60 miles).

The fiber optic communication lines for the proposed Project would be installed in the same trenches as the underground electrical collector cables and connect each turbine to a proposed operations and maintenance (O&M) building and collector substation(s). It is anticipated that a 5,500-square foot (50 feet by 110 feet) O&M building would be built within the vicinity of the collector substation. The final location would be determined in consultation with future operations personnel.

New access roads would be built to facilitate both construction and maintenance of the turbines. This road network would be approximately 70 miles of new and/or upgraded roads. These roads would be designed to minimize length and construction impact. Initially, turbine access roads would be built to approximately 25-feet wide, to accommodate the safe operation of construction equipment. Upon completion of construction, the turbine access roads would be reclaimed and narrowed to an extent allowing for the routine maintenance of the facility. Existing roads, including state and county roads and section line roads, would also be improved to aid in servicing the turbine sites. Approximately 30 to 40 miles of new turbine access roads would be built and 25 to 35 miles of existing roads would be used and, where appropriate, improved.

Under one alternative, a new 230-kV transmission line would be required to deliver the power from the collector substation(s) to a new 230-kV Western interconnection point at the existing Wessington Springs Substation. The Wessington Springs Substation is located approximately 9 to 12 miles from the proposed collector substation(s). The proposed line would be built using wood or steel H-frame (two pole) structures or steel single-pole structures. The structures would be about 85 to 95 feet high and span about 800 feet.

The other alternative site, near Winner, would require 34.5-kV to 115-kV collector substation(s) as well as a 115-kV transmission line to interconnect to Western's existing 115-kV Winner Substation. Other facilities would be similar to those described for the proposed Project. Because the proposed Project may involve action in floodplains or wetlands, this NOI also serves as a notice of proposed floodplain or wetland action, in accordance with DOE regulations for Compliance with Floodplain and Wetlands Environmental Review Requirements at 10 CFR 1022.12(a). The EIS will include a floodplain/wetland assessment and, if required, a floodplain/wetland statement of findings will be issued with the Final EIS or Western's and RUS' Records of Decision.

Agency Responsibilities

Western and RUS are serving as co-lead Federal agencies, as defined at 40 CFR 1501.5, for preparation of the EIS. With this notice, Native American Tribes and agencies with jurisdiction or special expertise are invited to be cooperating agencies. Such tribes or agencies may make a request to Western to be a cooperating agency by contacting Western's NEPA Document Manager. Designated cooperating agencies have certain responsibilities to support the NEPA process, as specified at 40 CFR 1501.6(b).

Environmental Issues

This notice is to inform agencies and the public of Western's and RUS' Federal actions, and the proposed Project, and to solicit comments and suggestions for consideration in preparing the EIS. To help the public frame its comments, this notice contains a list of potential environmental issues that Western and RUS have tentatively identified for analysis. These issues include:

1. Impacts on protected, threatened, endangered, or sensitive species of animals or plants;
2. Impacts on avian and bat species;
3. Impacts on land use, recreation, and transportation;
4. Impacts on cultural or historic resources and tribal values;
5. Impacts on human health and safety;
6. Impacts on air, soil, and water resources (including air quality and surface water impacts);
7. Visual impacts; and
8. Socioeconomic impacts and disproportionately high and adverse impacts to minority and low-income populations.

This list is not intended to be all-inclusive or to imply any predetermination of impacts. Environmental issues associated with Western's action, RUS' action, and PraireWinds' proposed Project will be addressed separately in the EIS. Western and RUS invite interested parties to suggest specific issues within these general categories, or other issues not included above, to be considered in the EIS.

Public Participation

Public participation and full disclosure are planned for the entire EIS process. The EIS process will include public scoping open house meetings and a scoping comment period to solicit comments from interested parties; consultation and involvement with appropriate Federal, State, local, and tribal governmental agencies; public review and a hearing on the draft EIS; publication of a final EIS; and publication of separate Records of Decision by Western and RUS, currently anticipated in 2010. Additional informal public meetings may be held in the proposed Project areas, if public interest and issues indicate a need.

The public scoping period begins with publication of this notice in the **Federal Register** and closes May 15, 2009. The purpose of the scoping meetings is to provide information about Western's Federal action, RUS's Federal action, and the proposed Project, display maps, answer questions, and take written comments from interested parties.

Western and RUS will hold open house public scoping meetings in Plankinton, South Dakota and Winner, South Dakota as noted above. Attendees are welcome to come and go at their convenience and to speak one-on-one with Project representatives and agency staff. The public will have the opportunity to provide written comments at the meeting. In addition, attendees may provide written comments by letter, fax, e-mail, or through the project's Web address.

To be considered in defining the scope of the EIS, comments should be received by the end of the scoping period. Anonymous comments will not be accepted.

Dated: March 30, 2009.

Timothy J. Meeks,

Administrator.

Dated: March 26, 2009.

Mark S. Plank,

Director, Engineering and Environmental Staff, Rural Utilities Service.

[FR Doc. E9–7813 Filed 4–6–09; 8:45 am]

BILLING CODE 6450–01–P

ENVIRONMENTAL PROTECTION AGENCY

[FRL–8789–8; EPA–HQ–OEI–2007–1152]

Amendment to the Toxic Substances Control Act Confidential Business Information Records Access System, EPA–20

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice.

SUMMARY: Pursuant to the provisions of the Privacy Act of 1974 (5 U.S.C. 552a), the Office of Pollution Prevention and Toxics is giving notice that it proposes to amend the ''Toxic Substance Control Act Confidential Business Information Records Access System'' to ''Confidential Business Information Tracking System (CBITS)'' to correct the official name of the system of record notice (SORN), system location and system manager.

DATES: Persons wishing to comment on this system of records notice must do so by May 18, 2009.

ADDRESSES: Submit your comments, identified by Docket ID No. EPA–HQ–2007–1152, by one of the following methods:

- *http://www.regulations.gov:* Follow the online instructions for submitting comments.
- *E-mail: oei.docket@epa.gov*
- *Fax:* 202–566–1752.
- *Mail:* OEI Docket, Environmental Protection Agency, Mailcode: 2822T, 1200 Pennsylvania Ave., NW., Washington, DC 20460.
- *Hand Delivery:* OEI Docket, EPA/DC, EPA West Building, Room B102, 1301 Constitution Ave., NW., Washington, DC. Such deliveries are only accepted during the Docket's normal hours of operation and special arrangements should be made for deliveries of boxed information.

Instructions: Direct your comments to Docket ID No. EPA–HQ–OEI–2007–1152. EPA's policy is that all comments received will be included in the public docket without change and may be made available online at *http://www.regulations.gov*, including any personal information provided, unless the comment includes information claimed to be Confidential Business Information (CBI) or other information for which disclosure is restricted by statute. Do not submit information that you consider to be CBI or otherwise protected through *http://www.regulations.gov*. The *http://www.regulations.gov* Web site is an ''anonymous access'' system, which means EPA will not know your identity or contact information unless you provide it in the body of your comment. If you send an e-mail comment directly to EPA without going through *http://www.regulations.gov* your e-mail address will be automatically captured and included as part of the comment that is placed in the public docket and made available on the Internet. If you submit an electronic comment, EPA recommends that you include your name and other contact information in the body of your comment and with any disk or CD–ROM you submit. If EPA cannot read your comment due to technical difficulties and cannot contact you for clarification, EPA may not be able to consider your comment. Electronic files should avoid the use of special characters, any form of encryption, and be free of any defects or viruses. For additional information about EPA's public docket visit the EPA Docket Center homepage at *http://www.epa.gov/epahome/dockets.htm.*

Docket: All documents in the docket are listed in the *http://www.regulations.gov* index. Although listed in the index, some information is not publicly available, e.g., CBI or other information for which disclosure is restricted by statute. Certain other material, such as copyrighted material, will be publicly available only in hard copy. Publicly available docket materials are available either

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APPENDIX D

WEST PRELIMINARY WILDLIFE STUDY REPORT

Wildlife Studies for the PrairieWinds SD1 Crow Lake Wind Resource Area Aurora, Brule, and Jerauld Counties, South Dakota

March 19, 2009 – July 7, 2009

Prepared for:

Basin Electric Power Cooperative
1717 East Interstate Avenue
Bismarck, ND 58503

Prepared by:

Clayton Derby, Kimberly Bay, and Ann Dahl

Western **E**co**S**ystems **T**echnology, Inc.
4007 State Street, Suite 109
Bismarck, North Dakota 58503

WEST, Inc.

August 18, 2009

EXECUTIVE SUMMARY

Western EcoSystems Technology, Inc. initiated surveys and monitoring of wildlife resources for Basin Electric Power Cooperative in the PrairieWinds SD1 Crow Lake Wind Resource Area in Aurora, Brule, and Jerauld Counties, South Dakota in spring 2009. The surveys implemented during the spring and summer of 2009 are part of a larger one-year study. Seasonal interim reports are designed to give Basin Electric Power Cooperative an early indication if high wildlife use is documented during surveys or if sensitive species are observed within the PrairieWinds SD1 Crow Lake Wind Resource Area.

Fixed-point bird use surveys were conducted from mid-March through late-May. Twenty fixed-point bird use survey plots were established within PrairieWinds SD1 Crow Lake Wind Resource Area. Each point was visited nine times during the spring season, for a total of 174 20-minute surveys. Sixty unique bird species were documented during fixed-point surveys. A total of 2,178 individual birds within 875 separate groups were recorded. Fifty-eight individual raptors in 56 groups were recorded (2.7% of overall bird observations), representing eight species. Waterfowl were by far the most abundant bird type comprising 48.4% of observations. Passerines were the second most abundant bird type, accounting for 24.5% of overall bird observations.

Breeding bird transect surveys were conducted from early-June to early-July, 2009. Thirty transect were surveyed three times during the summer of 2009 for a total of 90 breeding bird transect surveys. A total of 2,824 individual bird observations within 1,885 separate groups were recorded, representing 59 unique species. Cumulatively, four species (6.8% of all species) accounted for 85.4% of observations: brown-headed cowbird, western meadowlark, grasshopper sparrow, and red-winged blackbird, which are species typical of open grassland habitats. Woodland and wetland birds were also observed, but were less abundant than grassland species.

Eight South Dakota state species of concern were recorded within the PrairieWinds SD1 Crow Lake Wind Resource Area, including American white pelican, black-crowned night-heron, broad-winged hawk, Cooper's hawk, prairie falcon, Swainson's hawk, great blue heron, and McCown's longspur.

Prairie grouse lek surveys were conducted using a fixed-wing aircraft and one or two observers starting in late April and were completed in mid-May. Leks were also checked from the ground when possible. Five grouse leks were located, one of which was a greater prairie chicken lek.

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INTRODUCTION

Basin Electric Power Cooperative (BEPC) has proposed development of a wind-energy facility in the PrairieWinds SD1 Crow Lake Wind Resource Area (CLWRA), located in Aurora, Brule, and Jerauld Counties, South Dakota. BEPC requested that Western EcoSystems Technology, Inc. (WEST) develop and implement a standardized protocol for baseline wildlife studies in the CLWRA. The purpose of the studies was to estimate impacts of the proposed wind-energy facility on wildlife and to assist with siting turbines to minimize impacts to wildlife resources. These protocols for the baseline studies are similar to those used at other wind-energy facilities across the nation and follow the guidance of the National Wind Coordinating Collaborative (Anderson et al. 1999). The protocols were designed to help predict potential impacts to bird species, particularly raptors.

The purpose of the interim report is to bring items of biological interest to BEPC's attention, such as seasonal raptor use and the presence of sensitive species. The scope of the spring and summer 2009 wildlife studies included fixed-point bird use surveys, breeding bird transect surveys, grouse lek surveys, and incidental wildlife observations.

STUDY AREA

The proposed CLWRA is located in northwest Aurora, southwestern Jerauld, and northeastern Brule Counties, South Dakota (Figure 1). The overall project boundary as currently planned encompasses about 35,846 acres (14,506 ha) and will have approximately 101 wind turbines. The wind resource area is in the southern Missouri Coteau ecoregion (Bryce et al. 1996), and contains areas of native grasslands, wetlands and lakes, tilled agriculture, and small wooded areas. Immediately to the north is the existing Wessington Springs wind facility, which became operational in late 2008.

METHODS

Spring and summer studies conducted at CLWRA included fixed-point bird use surveys, breeding bird transect surveys, grouse lek surveys, and incidental wildlife observations.

Fixed-Point Bird Use Surveys

The objective of the fixed-point bird use surveys was to estimate the seasonal, spatial, and temporal use of the CLWRA by birds, particularly raptors (defined as kites, accipiters, buteos, harriers, eagles, falcons, or owls). Fixed-point surveys (variable circular plots) were conducted using methods described by Reynolds et al. (1980).

Bird Use Survey Plots
Twenty points were selected to include representative habitats and topography within the CLWRA, while achieving relatively even coverage of the study area (Figure 2). Each survey plot was an 800-meter (m) (2,625-feet [ft]) radius circle centered on the point.

Bird Survey Methods
All species of birds observed during 20-minute (min) fixed-point surveys were recorded. All large birds observed perched or flying over the plot were recorded and mapped. Small birds (e.g., sparrows) within 100 m (328 ft) of the point were recorded, but not mapped. Observations of birds beyond the 800-m radius were recorded, but were not included in the statistical analyses. Observations of small birds beyond the 100-m radius were also excluded from analysis.

The date, start and end time of the survey period, and weather information such as temperature, wind speed, wind direction, precipitation, visibility, and cloud cover were recorded for each survey. Species or best possible identification, number of individuals, sex and age class (if possible), distance from plot center and flight direction when first observed, closest distance, altitude above ground, activity (behavior), and habitat(s) were recorded for each observation. Behavior and habitat type were recorded based on the point of first observation. Approximate flight height and distance from plot center at first observation were recorded to the nearest 5-m (16-ft) interval. Other information recorded included whether or not the observation was auditory only and the 10-min interval of the 20-min survey in which the observation was initially noted.

Locations of raptors, other large birds, and species of concern were recorded on field maps by observation number and flight paths and perched locations were digitized using ArcGIS. Any notes or unusual observations were recorded in the comments section of the data sheet.

Observation Schedule
Sampling intensity was designed to document bird use and behavior by habitat and season within the CLWRA. Surveys were conducted approximately once a week during the spring (March 15 to May 31). Surveys were carried out during daylight hours and survey periods varied to approximately cover all daylight hours during a season. To the extent practical, each point was surveyed the same number of times; however, the schedule varied in response to adverse weather conditions (e.g., fog and/or rain), which caused delays and/or missed surveys.

Breeding Bird Surveys

The objectives of the transect bird use surveys were to identify breeding bird use and distribution within the CLWRA and to provide baseline data on breeding bird distribution if post-construction comparisons are conducted in the future.

Survey Methods
Thirty pre-determined 800-m line transects were slowly walked by observers (Figure 3). Transects were oriented east/west and located within the CLWRA based on a random starting point; transects were placed to avoid areas of tilled agriculture. Transects were followed using Global Positioning System (GPS) units and all visual or auditory bird observations were recorded. The distance of each bird along the transect and the perpendicular distance of the bird from the transect were recorded. In addition, the general habitat type in which each bird was observed was recorded.

In addition to GPS coordinates of the observation and species observed, the following data were recorded for each transect survey: date, start and end time of observation period, transect number, species or best possible identification, number of individuals, behavior, first altitude above ground, flight direction, and auditory-only observations. Weather information, such as temperature, wind speed, wind direction, precipitation, and cloud cover also were recorded for each transect survey. Behavior categories recognized included perched, soaring, flapping, breeding/nesting/courtship, gliding, singing, and other.

Observation Schedule
Each transect was surveyed three times from June 2 through July 7, 2009 (first visit: June 2 to June 7; second visit: June 23 to June 30; third visit: June 29 to July 7). Surveys were conducted from sunrise to 10:00 a.m.

Incidental Wildlife Observations

The objective of incidental wildlife observations was to provide a record of wildlife seen outside of the standardized surveys. All raptors, unusual or unique birds, sensitive species, mammals, reptiles, and amphibians were recorded in a similar fashion to standardized surveys. The observation number, date, time, species, number of individuals, sex/age class, distance from observer, activity, height above ground (for bird species), and habitat was recorded, and, in the case of sensitive species, the location was recorded using GPS coordinates.

Grouse Lek Surveys

The objective of the lek survey is to locate leks of the greater prairie chicken (*Tympanuchus cupido*) and/or sharp-tailed grouse (*Tympanuchus phasianellus*) in the study area. Lek surveys were conducted three times from April 30 through May 11, 2009 within the proposed boundary of the CLWRA and 400 m (0.25 mi) area outside of the boundary.

North/south transects were spaced approximately 400 m (0.25 mile) apart throughout the CLWRA. The length of each transect varied based on the project boundary but each transect extended 400 m beyond the boundary. A Cessna 172 airplane, with one pilot and one or two observers was used to conduct aerial surveys. Each transect was flown at an approximate height of 30-45 m (100-150 ft). Surveys occurred from approximately 30 min prior to sunrise until two hours after sunrise. Survey methodology was similar to that used for greater prairie chickens in Oklahoma (Martin and Knopf 1981). The location of any prairie grouse observed was marked on a hard copy map and a GPS coordinate was recorded. The number, activity, and lek status was recorded.

RESULTS

The results of the avian use surveys conducted in the CLWRA from March 19 to May 27, lek surveys from April 30 to May 11, and breeding birds from June 2 to July 7, 2009 are presented below.

Fixed-Point Bird Use Surveys

A total of 174 20-min fixed-point bird use surveys were conducted within CLWRA in the course of nine visits from March 19 through May 27, 2009.

Sixty unique species were observed during fixed-point bird use surveys (Table 1). A total of 2,178 individual birds within 875 separate groups were recorded. Fifty-eight individual raptors in 56 groups were recorded (2.7% of overall bird observations), representing eight species. Northern harrier (*Circus cyaneus*) and red-tailed hawk (*Buteo jamaicensis*) were the most frequently observed raptor species (22 and 11 individuals, respectively). Waterfowl were by far the most abundant bird type, comprising 48.4% of observations, primarily due to high numbers of Canada geese (*Branta canadensis*; 666 individuals) and mallards (*Anas platyrhynchos*; 213 individuals). These two species represented only 3.3% of all species, yet they accounted for 40.4% of bird observations. Passerines accounted for 24.5% of overall bird observations, with red-winged blackbird (*Agelaius phoeniceus*) and western meadowlark (*Sturnella neglecta*) being the most commonly observed passerine species (184 individuals and 156, respectively).

Breeding Bird Surveys

Breeding bird transect surveys were conducted at the CLWRA three times during the late spring and summer of 2009 for a total of 90 transect surveys. Fifty-nine species were identified, representing a total of 2,824 individual bird observations within 1,885 separate groups (Table 2). Over half (53.4%) of the birds observed during transect surveys were blackbirds and orioles (1,509 individuals). Cumulatively, four species (6.8% of all species) accounted for 85.4% of observations: brown-headed cowbird (*Molothrus ater*), western meadowlark, grasshopper sparrow (*Ammodramus savannarum*) and red-winged blackbird. Of raptors, only the northern harrier (11 individuals) and great horned owl (*Bubo virginianus*; one individual) were observed.

Incidental Wildlife Observations

Twenty-two bird species were recorded incidentally, totaling 324 birds within 59 separate groups (Table 3). Two state sensitive species, Swainson's hawk and prairie falcon, were observed within the CLWRA. Seven species were only recorded incidentally within the CLWRA: bank swallow (*Riparia riparia*), cattle egret (*Bubulcus ibis*), canvasback (*Aythya valisineria*), American wigeon (*Anas americana*), northern bobwhite (*Colinus virginianus*), redhead (*Aytha americana*), and red-headed woodpecker (*Melanerpes erythrocephalus*).

Eight mammal species were also observed incidentally, with the most abundant mammal being black-tailed prairie dog (*Cynomys ludovicianus*; 150 individuals). One amphibian species, spring peeper (*Pseudacris crucifer crucifer*) was also observed incidentally within the CLWRA (Table 3).

Species of Concern

Eight South Dakota state species of concern were recorded within the CLWRA, including American white pelican (*Pelecanus erythrorhyncos*), black-crowned night-heron (*Nycticorax*

nycticorax), broad-winged hawk (*Buteo platypterus*), Cooper's hawk (*Accipiter cooperii*), prairie falcon (*Falco mexicanus*), Swainson's hawk (*B. swainsoni*), great blue heron (*Ardea herodias*), and McCown's longspur (*Calcarius mccownii*; Table 4). No federally listed species were observed.

Grouse Lek Surveys

Aerial grouse lek surveys began on April 28, 2009 and concluded on May 11, 2009; the CLWRA was surveyed three times within that time period.

Five leks were located; two of those leks were observed incidentally from the ground. Two leks were confirmed to species. One of the leks was verified as a greater prairie chicken lek and one was verified as sharp-tailed grouse (Figure 4). The remaining three could not be identified to species.

DISCUSSION

Wildlife use may vary greatly by season, thus a wind-energy facility may have low use during one season, but may be higher during another. Because of this, rigorous impact assessments are generally based on at least one full year of surveys. The studies implemented at CLWRA during the spring and summer of 2009 are part of a larger one-year study. Seasonal interim reports are designed to give BEPC an early indication if high wildlife use is documented during surveys or if sensitive species are observed.

Passerines are generally the most abundant bird type found during fatality searches at wind-energy facilities (Erickson et al. 2001a). Raptors, however, have received much attention due to high rates of fatalities at the Altamont Pass wind-energy facility in California which has the highest recorded overall raptor fatality rate of any wind-energy facility (Erickson et al. 2002b). Based on the results from other wind resource areas, a ranking of seasonal mean raptor use was developed as: low (0 – 0.5 raptors/plot/20-min survey); low to moderate (0.5 – 1.0); moderate (1.0 – 2.0); high (2.0 – 3.0); and very high (> 3.0). Mean raptor use (number of raptors divided by the number of 800-m plots and the total number of surveys) in the CLWRA during spring of 2009 was low (0.34 raptors/plot/20-min survey), ranking thirty-third relative to data collected at 43 other existing and proposed wind-energy facilities (Figure 5).

Data from breeding birds were collected such that they can be used in a before/after study if the project is constructed and the use surveys are conducted post-construction. This can help investigate the displacement of grassland nesting species, as they were the most common group observed during surveys.

Grouse leks were identified within the project boundary. Prairie grouse, both greater prairie chickens and sharp-tailed grouse, have been identified as a species of concern in South Dakota. Lek locations can be used for siting turbines to minimize impacts. Surveys after construction can also be useful in determining impacts if surveys are completed.

While no federally listed species were observed during surveys, several species of state concern were documented. All state species of concern were birds, with few individuals of any one of these species being observed. No patterns were detected that would indicate areas to be avoided by construction.

Black-tailed prairie dogs were observed incidentally during surveys. Some studies have indicated that prairie dog colonies or other colonies of ground squirrels can locally increase raptor use at those locations (Good et al. 2005), as raptors will use the towns for hunting areas. Overall raptor use was low for the project area (Figure 5).

REFERENCES

Anderson, R., M. Morrison, K. Sinclair, and D. Strickland. 1999. Studying Wind Energy/Bird Interactions: A Guidance Document. Metrics and Methods for Determining or Monitoring Potential Impacts on Birds at Existing and Proposed Wind Energy Sites. Prepared for the Avian Subcommittee and National Wind Coordinating Committee (NWCC). December 1999. National Wind Coordinating Committee/RESOLVE. Washington, D.C. 87 pp. http://www.nationalwind.org/publications/wildlife/avian99/Avian_booklet.pdf

Bryce, S.A., J.M. Omernik, D.A. Pater, M. Ulmer, J. Schaar, J. Freeouf, R. Johnson, P. Kuck, and S.H. Azevedo. 1996. Ecoregions of North Dakota and South Dakota. (Color poster with map, descriptive text, summary tables, and photographs.) US Geological Survey (USGS) map (map scale 1:1,500,000). USGS, Reston, Virginia. US Environmental Protection Agency (USEPA). http://www.epa.gov/wed/pages/ecoregions/ndsd_eco.htm

Cooper, B.A., R.J. Blaha, T.J. Mabee, and J.H. Plissner. 2004. A Radar Study of Nocturnal Bird Migration at the Proposed Cotterel Mountain Wind Energy Facility, Idaho, Fall 2003. Technical report prepared for Windland, Inc., Boise, Idaho, by ABR, Inc., Forest Grove, Oregon. January 2004.

Erickson, W.P., D.P. Young, Jr., G. Johnson, J. Jeffrey, K. Bay, R. Good, and H. Sawyer. 2003a. Wildlife Baseline Study for the Wild Horse Wind Project. Summary of Results from 2002-2003 Wildlife Surveys May 10, 2002- May 22, 2003. Draft report prepared for Zilkha Renewable Energy, Portland, Oregon. Prepared by Western EcoSystems Technology, Inc. (WEST), Cheyenne, Wyoming. November 2003.

Erickson, W.P., J. Jeffrey, D.P. Young, Jr., K. Bay, R. Good, K. Sernka, and K. Kronner. 2003b. Wildlife Baseline Study for the Kittitas Valley Wind Project: Summary of Results from 2002 Wildlife Surveys. Final Report February 2002– November 2002. Prepared for Zilkha Renewable Energy, Portland, Oregon, by Western EcoSystems Technology, Inc. (WEST), Cheyenne, Wyoming, and Northwest Wildlife Consultants, Inc. (NWC), Pendleton, Oregon. January 2003.

Erickson, W.P., G.D. Johnson, K. Bay, and K. Kronner. 2002a. Ecological Baseline Study for the Zintel Canyon Wind Project. Final Report April 2001 – June 2002. Technical report prepared for Energy Northwest. Prepared for Energy Northwest by Western EcoSystems Technology, Inc. (WEST), Cheyenne, Wyoming, and Northwest Wildlife Consultants, Inc. (NWC), Pendleton, Oregon. June 2002.

Erickson, W.P., G.D. Johnson, D.P. Young, Jr., D. Strickland, R. Good, M. Bourassa, K. Bay, and K. Sernka. 2002b. Synthesis and Comparison of Baseline Avian and Bat Use, Raptor Nesting and Mortality Information from Proposed and Existing Wind Developments. Technical report prepared for Bonneville Power Administration, Portland, Oregon by WEST, Inc., Cheyenne, Wyoming. December 2002. http://www.bpa.gov/Power/pgc/wind/Avian_and_Bat_Study_12-2002.pdf

Erickson, W.P., G.D. Johnson, M.D. Strickland, D.P. Young, Jr. , K.J. Sernka, and R.E. Good. 2001a. Avian Collisions with Wind Turbines: A Summary of Existing Studies and Comparisons to Other Sources of Bird Collision Mortality in the United States. National Wind Coordinating Committee (NWCC) Publication and Resource Document. Prepared for the NWCC by WEST, Inc., Cheyenne, Wyoming. August 2001. http://www.nationalwind.org/publications/default.htm and http://www.west-inc.com

Erickson, W.P., E. Lack, M. Bourassa, K. Sernka, and K. Kronner. 2001b. Wildlife Baseline Study for the Nine Canyon Wind Project, Final Report May 2000-October 2001 Technical report prepared for Energy Northwest, Richland, Washington.

Jeffrey, J.D., W.P. Erickson, K.J. Bay, V.K. Poulton, W.L. Tidhar, and J.E. Baker. 2008. Wildlife Baseline Studies for the Golden Hills Wind Resource Area, Sherman County, Oregon. Final Report May 2006 – October 2007. Prepared for BP Alternative Energy North America Inc., Houston, Texas, by Western EcoSystems Technology, Inc. (WEST), Cheyenne, Wyoming.

Johnson, G.D., J. Eddy, and K. Bay. 2006a. Baseline Avian Use of the Sand Hills Wind Energy Project, Albany County, Wyoming. Summer Breeding Season and Fall Migration 2006. Draft interim report prepared for CH2M Hill, Englewood, Colorado, by Western EcoSystems Technology, Inc. (WEST), Cheyenne, Wyoming. November 6, 2006.

Johnson, G.D. and W.P. Erickson. 2004. Analysis of Potential Wildlife/Wind Plant Interactions, Bighorn Site, Klickitat County, Washington. Prepared for CH2M HILL, Portland, Oregon by WEST, Inc., Cheyenne, Wyoming. August 2004.

Johnson, G.D., W.P. Erickson, K. Bay, and K. Kronner. 2002. Baseline Ecological Studies for the Klondike Wind Project, Sherman County, Oregon. Final report prepared for Northwestern Wind Power, Goldendale, Washington, by Western EcoSystems Technology, Inc. (WEST) Cheyenne, Wyoming, and Northwest Wildlife Consultants, Inc. (NWC), Pendleton, Oregon. May 29, 2002.

Johnson, G.D., W.P. Erickson, and J.D. Jeffrey. 2006b. Analysis of Potential Wildlife Impacts from the Windy Point Wind Energy Project, Klickitat County, Washington. Unpublished report prepared by Western EcoSystems Technology, Inc. (WEST), Cheyenne, Wyoming. February 3, 2006.

Johnson, G.D., J. Jeffrey, J. Baker, and K. Bay. 2007. Baseline Avian Studies for the Windy Flats Wind Energy Project, Klickitat County, Washington. Prepared for Windy Point Partners, LLC., by Western EcoSystems Technology, Inc. (WEST), Cheyenne, Wyoming. May 29, 2007.

Johnson, G.D., J. Jeffrey, V. Poulton, and K. Bay. 2006c. Baseline Ecological Studies for the DNR Wind Energy Project, Klickitat County, Washington. Prepared for Windtricity Ventures, LLC, Goldendale, Washington, by WEST, Inc., Cheyenne, Wyoming. September 5, 2006.

Johnson, G.D., J. Jeffrey, V. Poulton, and K. Bay. 2006d. Baseline Ecological Studies for the Hoctor Ridge Wind Energy Project, Klickitat County, Washington. Prepared for Windtricity Ventures, LLC., Goldendale, Washington by WEST, Inc., Cheyenne, Wyoming. September 5, 2006.

Johnson, G.D., J. Jeffrey, V. Poulton, and K. Bay. 2006e. Baseline Ecological Studies for the Imrie Ranch South Wind Energy Project, Klickitat County, Washington. Prepared for Windtricity Ventures, LLC, by WEST, Inc., Cheyenne, Wyoming. September 5, 2006.

Johnson, G.D., D.P. Young, W.P. Erickson, C.E. Derby, M.D. Strickland, and R.E. Good. 2000. Wildlife Monitoring Studies, SeaWest Windpower Plant, Carbon County, Wyoming, 1995-1999. Final report prepared for SeaWest Energy Corporation, San Diego, California, and the Bureau of Land Management, Rawlins, Wyoming, by Western EcoSystems Technology, Inc. (WEST), Cheyenne, Wyoming. August 9, 2000. http://www.west-inc.com and http://www.west-inc.com/reports/fcr_final_baseline.pdf

Kerlinger, P., L. Culp, and R. Curry. 2005. Post-Construction Avian Monitoring Study for the High Winds Wind Power Project, Solano County, California. Year One Report. Prepared for High Winds, LLC and FPL Energy.

Martin, S.A. and F.L. Knopf. 1981. Aerial Survey of Greater Prairie Chicken Leks. Wildlife Society Bulletin 9(3): 219-221.

Northwest Wildlife Consultants, Inc. (NWC) and Western Ecosystems Technology, Inc. (WEST). 2004. Ecological Baseline Studies for the Roosevelt Wind Project, Klickitat County, Washington. Final Report. Prepared by NWC, Pendleton, Oregon, and WEST, Inc., Cheyenne, Wyoming. September 2004.

Northwest Wildlife Consultants, Inc. (NWC) and Western Ecosystems Technology, Inc. (WEST). 2005a. Ecological Baseline Studies and Wildlife Impact Assessment for the White Creek Wind Power Project, Klickitat County, Washington. Prepared for Last Mile Electric Cooperative, Goldendale, Washington, by Northwest Wildlife Consultants, Inc., Goldendale, Washington, and Western EcoSystems Technology, Inc. (WEST), Cheyenne, Wyoming. January 12, 2005.

Northwest Wildlife Consultants, Inc. (NWC) and Western Ecosystems Technology, Inc. (WEST). 2005b. Wildlife Baseline Study for the Leaning Juniper Wind Power Project, Gilliam County, Oregon. Prepared for PPM Energy, Portland, Oregon and CH2M HILL, Portland, Oregon by NWC, Pendleton, Oregon, and WEST, Inc., Cheyenne, Wyoming. November 3, 2005.

Reynolds, R.T., J.M. Scott, and R.A. Nussbaum. 1980. A Variable Circular-Plot Method for Estimating Bird Numbers. Condor 82(3): 309-313.

URS Corporation, Western EcoSystems Technology, Inc. (WEST), and Northwest Wildlife Consultants, Inc. (NWC). 2001. Avian Baseline Study for the Stateline Project. Prepared for FPL Energy Vansycle, LLC, Juno Beach, Florida.

Western Ecosystems Technology, Inc. (WEST). 2005a. Ecological Baseline Study at the Elkhorn Wind Power Project. Exhibit A. Final report prepared for Zilkha Renewable Energy, LLC., Portland, Oregon, by WEST, Cheyenne, Wyoming. June 2005.

Western EcoSystems Technology, Inc. (WEST). 2005b. Ecological Baseline Study for the Proposed Reardon Wind Project, Lincoln County, Washington. Draft Final Report. Prepared for Energy Northwest, Richland, Washington, by Western EcoSystems Technology, Inc. (WEST), Cheyenne, Wyoming. June 2005.

Western EcoSystems Technology, Inc. (WEST). 2005c. Wildlife and Habitat Baseline Study for the Proposed Biglow Canyon Wind Power Project, Sherman County, Oregon. March 2004 - August 2005. Prepared for Orion Energy LLC., Oakland, California. October, 2005. WEST. Cheyenne, Wyoming.

Western EcoSystems Technology, Inc. (WEST). 2006a. Diablo Winds Wildlife Monitoring Progress Report, March 2005 - February 2006. Technical report submitted to FPL Energy and Alameda County California. WEST. Cheyenne, Wyoming.

Western EcoSystems Technology, Inc. (WEST). 2006b. Wildlife Baseline Study for the North Valley County Wind Project: Summary of Results from 2006 Wildlife Surveys. Prepared for POWER Engineers, Boise, Idaho, and Wind Hunter, LLC., Grapevine, Texas. Prepared by Western EcoSystems Technology, Inc. (WEST), Bismarck, North Dakota. December 8, 2006.

Western EcoSystems Technology, Inc. (WEST). 2007. Wildlife and Habitat Baseline Study for the Vantage Wind Power Project, Kittitas County, Washington. Draft report prepared for Invenergy by Western EcoSystems Technology, Inc. (WEST), Cheyenne Wyoming and Walla Walla, Washington. June 2007.

Western EcoSystems Technology, Inc. (WEST) and Colorado Plateau Research Station (CPRS). 2006. Avian Studies for the Proposed Sunshine Wind Park, Coconino County, Arizona. Prepared for Sunshine Arizona Wind Energy, LLC., Flagstaff, Arizona, by WEST, Cheyenne, Wyoming, and the CPRS, Northern Arizona University, Flagstaff, Arizona. May 2006.

Western EcoSystems Technology, Inc. (WEST), EDAW, Inc., and Bloom Biological, Inc. 2007. Baseline Avian Use and Risk Assessment for the Homestead Wind Energy Project, Kern County, California. 2005 – 2006. Prepared for Horizon Wind Energy by Western EcoSystems Technology, Inc. (WEST), EDAW, Inc., San Diego, California, and Bloom Biological, Inc., Santa Anna, California. April 19, 2007.

Western EcoSystems Technology, Inc. (WEST) and Northwest Wildlife Consultants, Inc. (NWC). 2003. Analysis of Potential Avian/Wind Plant Interactions in Klickitat County, Washington. Supplement to the Klickitat County Programmatic Environmental Impact Statement. Prepared for the Resource Development Department, Klickitat County,Goldendale, Washington, by WEST, Cheyenne, Wyoming, and NWC, Pendleton, Oregon. May 2003.

Young, D.P. Jr., W.P. Erickson, K. Bay, J. Jeffrey, E.G. Lack, R.E. Good, and H.H. Sawyer. 2003a. Baseline Avian Studies for the Proposed Hopkins Ridge Wind Project, Columbia County, Washington. Final Report, March 2002 - March 2003. Prepared for RES North America, LLC., Portland, Oregon, by Western EcoSystems Technology, Inc.(WEST), Cheyenne, Wyoming. April 30, 2003.

Young, D.P. Jr., W.P. Erickson, K. Bay, J. Jeffrey, E.G. Lack, and H.H. Sawyer. 2003b. Baseline Avian Studies for the Proposed Desert Claim Wind Power Project, Kittitas County, Washington. Final Report. Prepared for Desert Claim Wind Power, LLC, Ellensburg, Washington, by Western EcoSystems Technology, Inc. (WEST), Cheyenne, Wyoming. July 2003.

Young, D.P. Jr., W.P. Erickson, J. Jeffrey, K. Bay, R.E. Good, and E.G. Lack. 2003c. Avian and Sensitive Species Baseline Study Plan and Final Report. Eurus Combine Hills Turbine Ranch, Umatilla County, Oregon. Technical report prepared for Eurus Energy America Corporation, San Diego, California and Aeropower Services, Inc., Portland, Oregon, by Western EcoSystems Technology, Inc. (WEST), Cheyenne, Wyoming. March 10, 2003.

Young, D.P. Jr., G.D. Johnson, V.K. Poulton, and K. Bay. 2007a. Ecological Baseline Studies for the Hatchet Ridge Wind Energy Project, Shasta County, California. Prepared for Hatchet Ridge Wind, LLC, Portland, Oregon by Western EcoSystems Technology, Inc. (WEST), Cheyenne, Wyoming. August 31, 2007. http://www.co.shasta.ca.us/Departments/Resourcemgmt/drm/Hatchet%20Ridge/DEIR/App_C-1.pdf

Young, D.P. Jr., V.K. Poulton, and K. Bay. 2007b. Ecological Baseline Studies Report. Proposed Dry Lake Wind Project, Navajo County, Arizona. Prepared for PPM Energy, Portland, Oregon, by Western EcoSystems Technology, Inc. (WEST), Cheyenne, Wyoming. July 1, 2007.

Table 1. Summary of individuals and group observations for fixed-point bird use surveys at the PrairieWinds SD1 Crow Lake Wind Resource Area, March 19 – May 27, 2009.

		Spring	
Species	**Scientific Name**	**# grps**	**# Obs**
Waterbirds		**29**	**176**
American white pelican	*Pelecanus erythrorhyncos*	2	49
black-crowned night-heron	*Nycticorax nycticorax*	1	4
double-crested cormorant	*Phalacrocorax auritus*	2	40
Forster's tern	*Sterna forsteri*	1	1
Franklin's gull	*Larus pipixcan*	6	25
ring-billed gull	*Larus delawarensis*	12	30
sandhill crane	*Grus canadensis*	3	24
unidentified gull		2	3
Waterfowl		**155**	**1,053**
blue-winged teal	*Anas discors*	9	29
Canada goose	*Branta canadensis*	20	666
gadwall	*Anas strepera*	4	9
green-winged teal	*Anas crecca*	1	2
mallard	*Anas platyrhynchos*	86	213
northern pintail	*Anas acuta*	23	55
northern shoveler	*Anas clypeata*	8	24
ring-necked duck	*Aythya collaris*	1	1
snow goose	*Chen caerulescens*	1	50
unidentified duck		2	4
Shorebirds		**87**	**96**
common snipe	*Gallinago gallinago*	1	1
killdeer	*Charadrius vociferous*	64	69
marbled godwit	*Limosa fedoa*	9	12
upland sandpiper	*Bartramia longicauda*	13	14
Rails/Coots		**1**	**2**
American coot	*Fulica americana*	1	2
Raptors		**56**	**58**
American kestrel	*Falco sparverius*	5	5
broad-winged hawk	*Buteo platypterus*	3	3
Cooper's hawk	*Accipiter cooperii*	1	1
great horned owl	*Bubo virginianus*	1	1
northern harrier	*Circus cyaneus*	22	22
prairie falcon	*Falco mexicanus*	1	1
red-tailed hawk	*Buteo jamaicensis*	11	11
Swainson's hawk	*Buteo swainsoni*	6	7
unidentified buteo		6	7

Table 1. Summary of individuals and group observations for fixed-point bird use surveys at the PrairieWinds SD1 Crow Lake Wind Resource Area, March 19 – May 27, 2009.

		Spring	
Species	**Scientific Name**	**# grps**	**# Obs**
Upland Gamebirds		**162**	**180**
greater prairie-chicken	*Tympanuchus cupido*	4	5
ring-necked pheasant	*Phasianus colchicus*	156	173
sharp-tailed grouse	*Tympanuchus phasianellus*	2	2
Doves/Pigeons		**47**	**62**
mourning dove	*Zenaida macroura*	47	62
Large Corvids		**2**	**2**
American crow	*Corvus brachyrhynchos*	2	2
Passerines		**321**	**533**
American goldfinch	*Carduelis tristis*	1	2
American robin	*Turdus migratorius*	4	6
baltimore oriole	*Icterus galbula*	2	2
barn swallow	*Hirundo rustica*	13	21
bobolink	*Dolichonyx oryzivorus*	8	9
brown-headed cowbird	*Molothrus ater*	24	44
chipping sparrow	*Spizella passerine*	1	1
cliff swallow	*Petrochelidon pyrrhonota*	2	5
common grackle	*Quiscalus quiscula*	7	17
dickcissel	*Spiza Americana*	2	2
eastern kingbird	*Tyrannus tyrannus*	2	2
European starling	*Sturnus vulgaris*	3	8
horned lark	*Eremophila alpestris*	25	56
loggerhead shrike	*Lanius ludovicianus*	1	1
orchard oriole	*Icterus spurious*	1	1
red-winged blackbird	*Agelaius phoeniceus*	62	184
savannah sparrow	*Passerculus sandwichensis*	5	5
song sparrow	*Melospiza melodia*	1	1
tree swallow	*Tachycineta bicolor*	2	2
unidentified sparrow		1	3
unidentified swallow		1	2
western kingbird	*Tyrannus verticalis*	1	1
western meadowlark	*Sturnella neglecta*	150	156
yellow-headed blackbird	*Xanthocephalus xanthocephalus*	1	1
yellow warbler	*Dendroica petechia*	1	1
Other Birds		**14**	**15**
common nighthawk	*Chordeiles minor*	4	4
northern flicker	*Colaptes auratus*	9	10
unidentified woodpecker		1	1
Unidentified Birds		**1**	**1**
unidentified bird		1	1
Overall		**875**	**2,178**

Table 2. Total number of groups and individuals for each bird type and species observed during transect bird use surveys at the PrairieWinds SD1 Crow Lake Wind Resource Area, June 2 – July 7, 2009.

Species/Type	Scientific Name	# grps	# obs
Waterbirds		**8**	**12**
double-crested cormorant	*Phalacrocorax auritus*	3	7
Forster's tern	*Sterna forsteri*	1	1
great blue heron	*Ardea herodias*	2	2
unidentified tern		2	2
Waterfowl		**43**	**128**
blue-winged teal	*Anas discors*	8	20
Canada goose	*Branta canadensis*	1	5
gadwall	*Anas strepera*	1	1
mallard	*Anas platyrhynchos*	15	44
northern pintail	*Anas acuta*	5	10
northern shoveler	*Anas clypeata*	2	10
redhead	*Aythya Americana*	1	1
ring-necked duck	*Aythya collaris*	1	1
unidentified duck		9	36
Shorebirds		**71**	**93**
common snipe	*Gallinago gallinago*	3	3
killdeer	*Charadrius vociferous*	21	24
marbled godwit	*Limosa fedoa*	5	6
unidentified sandpiper		1	1
upland sandpiper	*Bartramia longicauda*	40	58
willet	*Catoptrophorus semipalmatus*	1	1
Rails/Coots		**1**	**1**
American coot	*Fulica americana*	1	1
Raptors		**12**	**12**
Northern Harrier		*11*	*11*
northern harrier	*Circus cyaneus*	11	11
Owls		*1*	*1*
great horned owl	*Bubo virginianus*	1	1
Upland Gamebirds		**86**	**118**
greater prairie-chicken	*Tympanuchus cupido*	12	23
ring-necked pheasant	*Phasianus colchicus*	72	93
sharp-tailed grouse	*Tympanuchus phasianellus*	2	2
Doves/Pigeons		**26**	**41**
mourning dove	*Zenaida macroura*	25	38
rock pigeon	*Columba livia*	1	3
Passerines		**1,636**	**2,417**
Passerines		*9*	*11*
unidentified passerine		9	11

Table 2. Total number of groups and individuals for each bird type and species observed during transect bird use surveys at the PrairieWinds SD1 Crow Lake Wind Resource Area, June 2 – July 7, 2009.

Species/Type	Scientific Name	# grps	# obs
Blackbirds/Orioles		*910*	*1,509*
brown-headed cowbird	*Molothrus ater*	273	544
bobolink	*Dolichonyx oryzivorus*	70	83
Brewer's blackbird	*Euphagus cyanocephalus*	1	1
common grackle	*Quiscalus quiscula*	23	37
European starling	*Sturnus vulgaris*	2	36
great-tailed grackle	*Quiscalus mexicanus*	3	3
orchard oriole	*Icterus spurious*	1	1
red-winged blackbird	*Agelaius phoeniceus*	120	225
western meadowlark	*Sturnella neglecta*	396	535
yellow-headed blackbird	*Xanthocephalus xanthocephalus*	21	44
Finches		*6*	*7*
American goldfinch	*Carduelis tristis*	6	7
Flycatchers		*42*	*54*
eastern kingbird	*Tyrannus tyrannus*	32	41
western kingbird	*Tyrannus verticalis*	10	13
Grassland/Sparrows		*585*	*669*
chestnut-collared longspur	*Calcarius ornatus*	70	83
clay-colored sparrow	*Spizella pallid*	12	13
chipping sparrow	*Spizella passerine*	16	17
dickcissel	*Spiza Americana*	23	26
field sparrow	*Spizella pusilla*	8	8
grasshopper sparrow	*Ammodramus savannarum*	282	340
horned lark	*Eremophila alpestris*	2	2
McCown's longspur	*Calcarius mccownii*	1	1
savannah sparrow	*Passerculus sandwichensis*	123	123
song sparrow	*Melospiza melodia*	1	2
unidentified sparrow		43	50
vesper sparrow	*Pooecetes gramineus*	4	4
Swallows		*75*	*158*
bank swallow	*Riparia riparia*	10	12
barn swallow	*Hirundo rustica*	55	128
cliff swallow	*Petrochelidon pyrrhonota*	5	8
n. rough-winged swallow	*Stelgidopteryx serripennis*	2	5
unidentified swallow		3	5
Thrushes		*4*	*4*
American robin	*Turdus migratorius*	3	3
unidentified bluebird		1	1
Warblers		*3*	*3*
common yellowthroat	*Geothlypis trichas*	1	1
yellow warbler	*Dendroica petechia*	2	2

Table 2. Total number of groups and individuals for each bird type and species observed during transect bird use surveys at the PrairieWinds SD1 Crow Lake Wind Resource Area, June 2 – July 7, 2009.

Species/Type	Scientific Name	# grps	# obs
Wrens		*2*	*2*
house wren	*Troglodytes aedon*	1	1
marsh wren	*Cistothorus palustris*	1	1
Other Birds		**1**	**1**
Woodpeckers		*1*	*1*
northern flicker	*Colaptes auratus*	1	1
Unidentified Birds		**1**	**1**
unidentified bird		1	1
Overall		**1,885**	**2,824**

Table 3. Incidental wildlife observed while conducting all surveys at the PrairieWinds SD1 Crow Lake Wind Resource Area, March 19, 2009 – July 7, 2009.

Species	Scientific Name	# grps	# obs
blue-winged teal	*Anas discors*	6	65
mallard	*Anas platyrhynchos*	18	58
bank swallow	*Riparia riparia*	1	50
northern pintail	*Anas acuta*	4	38
Franklin's gull	*Larus pipixcan*	1	30
northern shoveler	*Anas clypeata*	5	26
sandhill crane	*Grus canadensis*	2	18
cattle egret	*Bubulcus ibis*	1	8
red-tailed hawk	*Buteo jamaicensis*	7	7
canvasback	*Aythya valisineria*	1	6
American wigeon	*Anas americana*	1	4
prairie falcon	*Falco mexicanus*	2	2
northern bobwhite	*Colinus virginianus*	1	2
redhead	*Aythya americana*	1	2
American kestrel	*Falco sparverius*	1	1
great horned owl	*Bubo virginianus*	1	1
loggerhead shrike	*Lanius ludovicianus*	1	1
northern harrier	*Circus cyaneus*	1	1
red-headed woodpecker	*Melanerpes erythrocephalus*	1	1
sharp-tailed grouse	*Tympanuchus phasianellus*	1	1
Swainson's hawk	*Buteo swainsoni*	1	1
upland sandpiper	*Bartramia longicauda*	1	1
Bird Total	**22 Species**	**59**	**324**
black-tailed prairie dog	*Cynomys ludovicianus*	3	150
white-tailed deer	*Odocoileus virginianus*	15	43
unidentified jack rabbit		5	6
cottontail rabbit	*Sylvilagus floridanus*	2	4
mule deer	*Odocoileus hemionus*	1	3
coyote	*Canis latrans*	1	1
mink	*Mustela vison*	1	1
striped skunk	*Mephitis mephitis*	1	1
Mammal Total	**8 Species**	**24**	**203**
spring peeper	*Pseudacris crucifer crucifer*	12	90

Table 4. Summary of sensitive species observed at the PrairieWinds SD1 Crow Lake Wind Resource Area during fixed-point bird use surveys (FP), breeding bird transect surveys (Trans.), and as incidental wildlife observations (Inc.), March 19, 2009 – July 7, 2009.

			FP		Trans.		Inc.		Total	
Species	**Scientific Name**	**Status**	**# of grps**	**# of obs**	**# of grps**	**# of obs**	**# of grps**	**# of obs**	**# of grps**	**# of obs**
American white pelican	*Pelecanus erythrorhyncos*	SSC	2	49	0	0	0	0	2	49
Swainson's hawk	*Buteo swainsoni*	SSC	8	9	0	0	1	1	9	10
black-crowned night-heron	*Nycticorax nycticorax*	SSC	1	4	0	0	0	0	1	4
broad-winged hawk	*Buteo platypterus*	SSC	3	3	0	0	0	0	3	3
prairie falcon	*Falco mexicanus*	SSC	1	1	0	0	2	2	3	3
Cooper's hawk	*Accipiter cooperii*	SSC	2	2	0	0	0	0	2	2
great blue heron	*Ardea herodias*	SSC	0	0	2	2	0	0	2	2
McCown's longspur	*Calcarius mccownii*	SSC	0	0	1	1	0	0	1	1
Total	**8 Species**		**17**	**68**	**3**	**3**	**3**	**3**	**23**	**74**

SSC = State species of concern.

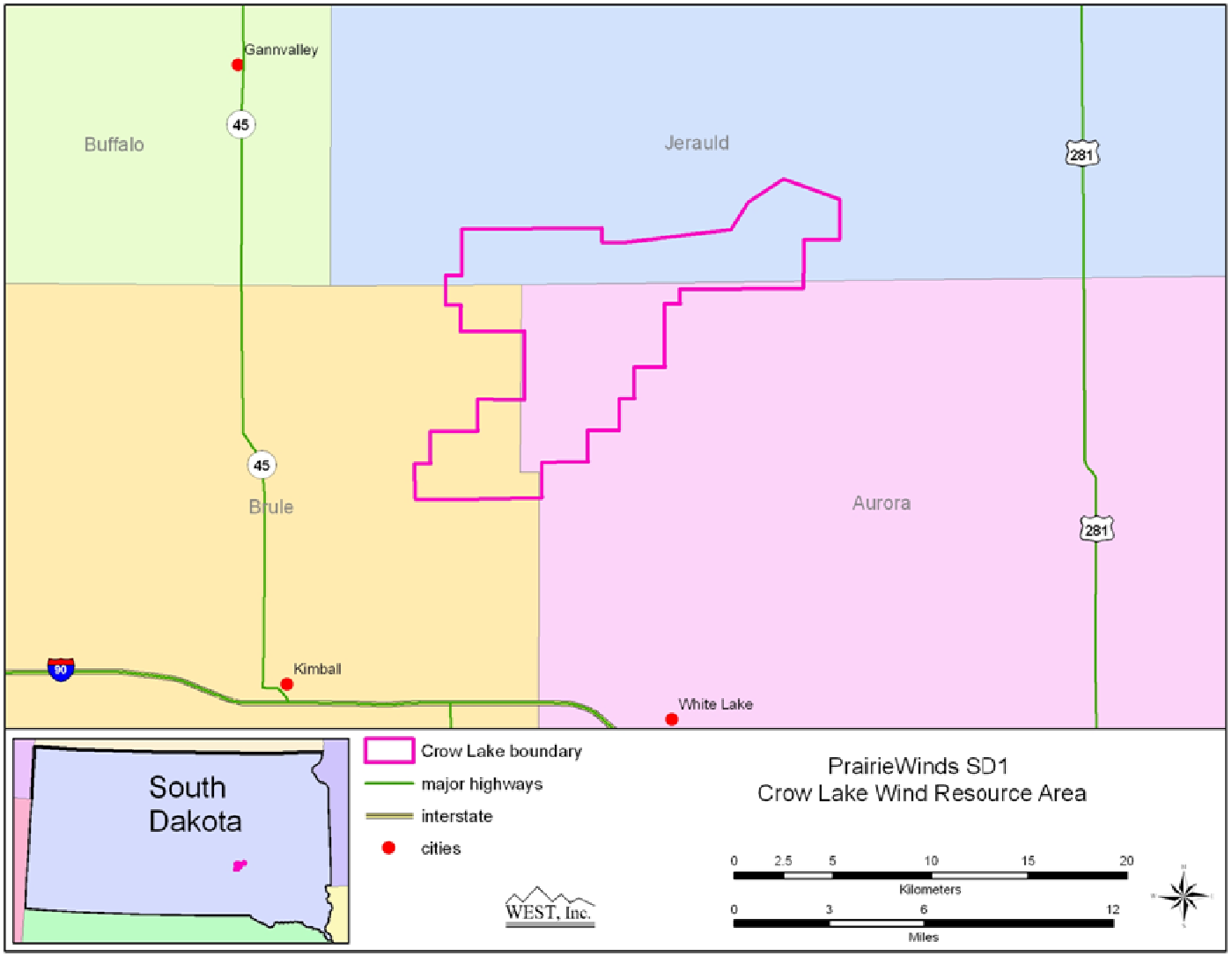

Figure 1. Study area map of the proposed PrairieWinds SD1 Crow Lake Wind Resource Area.

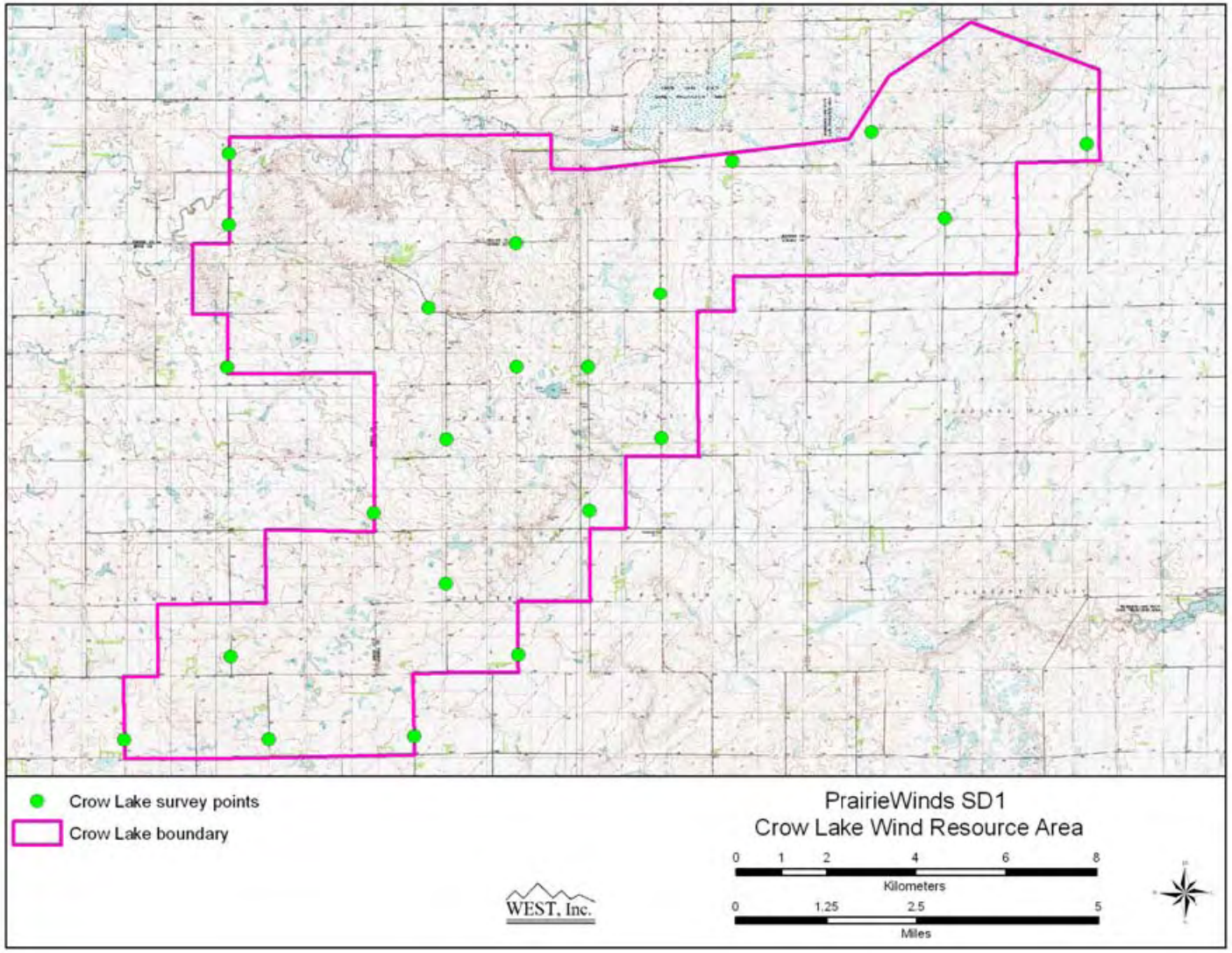

Figure 2. Fixed-point observation locations at the proposed PrairieWinds SD1 Crow Lake Wind Resource Area, spring 2009.

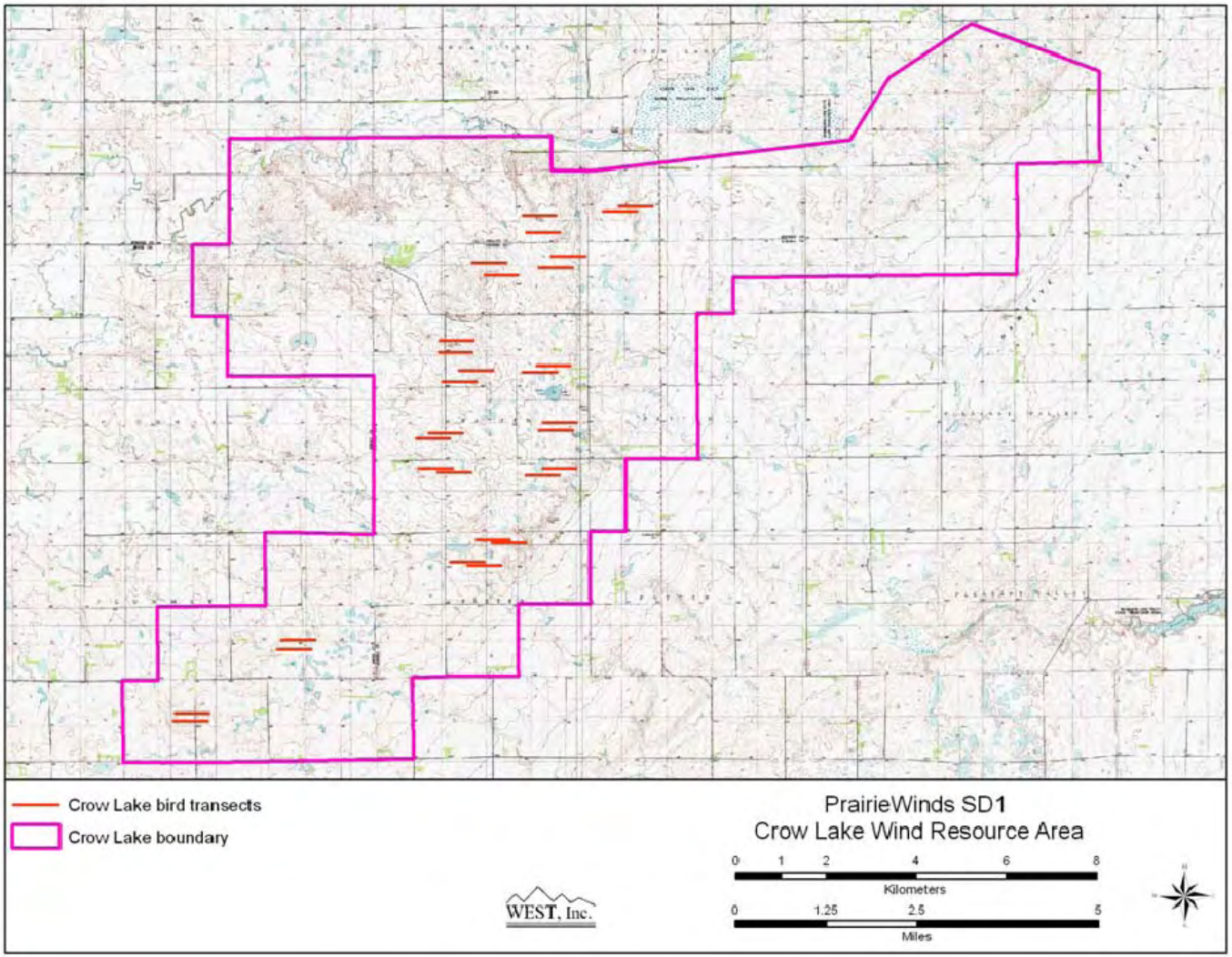

Figure 3. Transects used for breeding bird surveys at the proposed PrairieWinds SD1 Crow Lake Wind Resource Area, summer 2009.

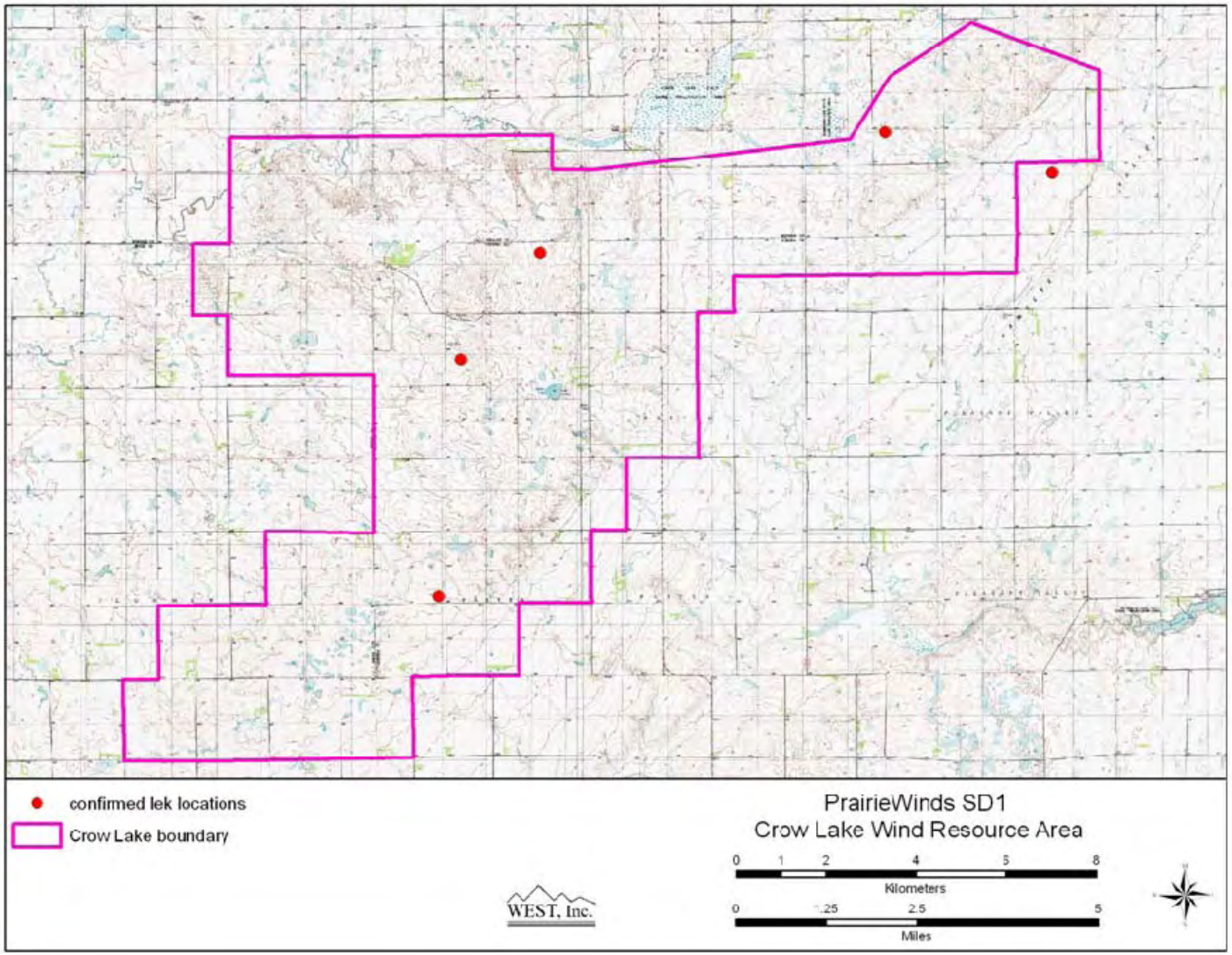

Figure 4. Grouse lek locations at the proposed PrairieWinds SD1 Crow Lake Wind Resource Area.

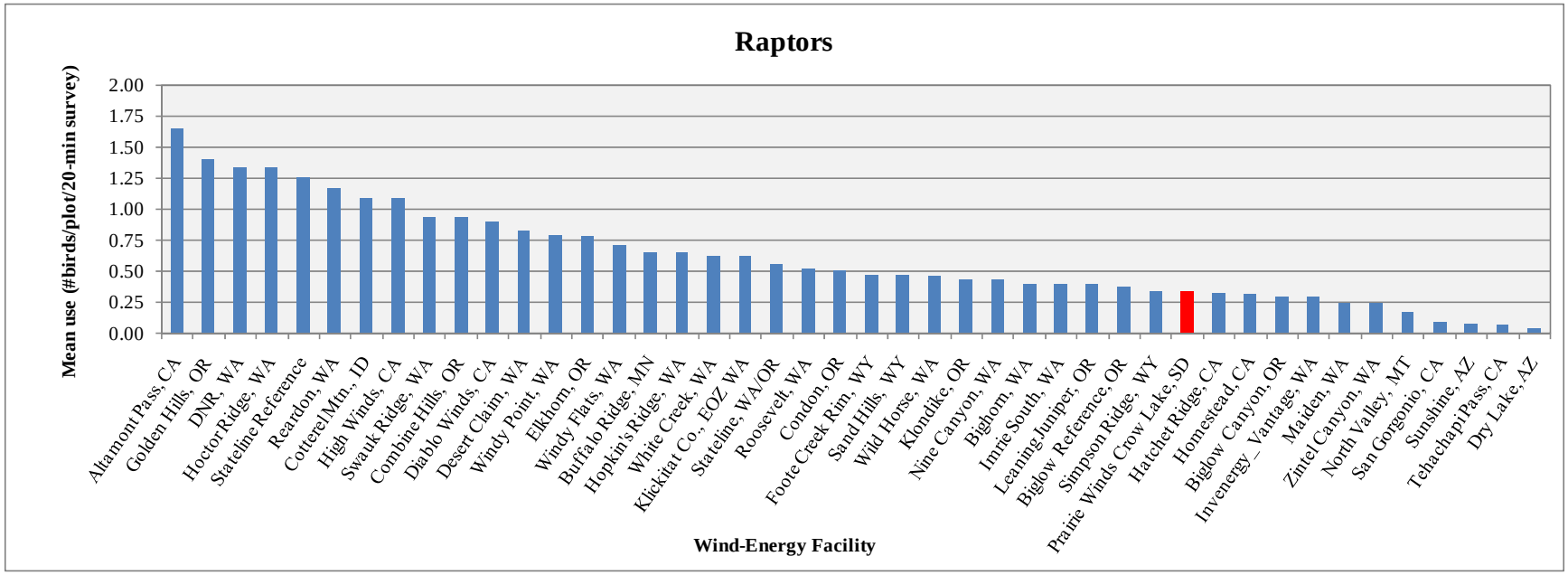

Figure 5. Comparison of spring raptor use between the PrairieWinds SD1 Crow Lake Wind Resource Area and other US wind-energy facilities.

Data from the following sources:

PrairieWinds SD1Crow Lake, SD	This study				
Altamont Pass, CA	Erickson et al. 2002b	Buffalo Ridge, MN	Erickson et al. 2002b	Leaning Juniper, OR	NWC and WEST 2005b
Golden Hills, OR	Jeffrey et al. 2008	Hopkin's Ridge, WA	Young et al. 2003a	Biglow Reference, OR	WEST 2005c
DNR, WA	Johnson et al. 2006c	White Creek, WA	NWC and WEST 2005a	Simpson Ridge, WY	Johnson et al. 2000
Hoctor Ridge, WA	Johnson et al. 2006d	Klickitat Co., EOZ WA	WEST and NWC 2003	Hatchet Ridge, CA	Young et al. 2007a
Stateline Reference	URS et al. 2001	Stateline, WA/OR	Erickson et al. 2002b	Homestead, CA	WEST et al. 2007
Reardon, WA	WEST 2005b	Roosevelt, WA	NWC and WEST 2004	Biglow Canyon, OR	WEST 2005c
Cotterel Mtn., ID	Cooper et al. 2004	Condon, OR	Erickson et al. 2002b	Invenergy_Vantage, WA	WEST 2007
High Winds, CA	Kerlinger et al. 2005	Foote Creek Rim, WY	Erickson et al. 2002b	Maiden, WA	Erickson et al. 2002b
Swauk Ridge, WA	Erickson et al. 2003b	Sand Hills, WY	Johnson et al. 2006a	Zintel Canyon, WA	Erickson et al. 2002a
Combine Hills, OR	Young et al. 2003c	Wild Horse, WA	Erickson et al. 2003a	North Valley, MT	WEST 2006b
Diablo Winds, CA	WEST 2006a	Klondike, OR	Johnson et al. 2002	San Gorgonio, CA	Erickson et al. 2002b
Desert Claim, WA	Young et al. 2003b	Nine Canyon, WA	Erickson et al. 2001b Johnson and Erickson	Sunshine, AZ	WEST and the CPRS 2006
Windy Point, WA	Johnson et al. 2006b	Bighorn, WA	2004	Tehachapi Pass, CA	Erickson et al. 2002b
Elkhorn, OR	WEST 2005a	Imrie, WA	Johnson et al. 2006e	Dry Lake, AZ	Young et al. 2007b
Windy Flats, WA	Johnson et al. 2007				

Appendix E

Post Card Scoping Advertisement

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

YOU ARE INVITED!

TO A PUBLIC MEETING

The USDA Rural Utilities Service (RUS) and Western Area Power Administration (Western) are hosting two open-house public meetings to discuss a new 150-megawatt wind energy project.

PrairieWinds SD1, Inc., (PrairieWinds), a subsidiary of Basin Electric Power Cooperative, proposes to construct 101 wind turbines in one of two alternate locations. One location would be south of Wessington Springs, approximately **10 miles north of the town of White Lake**, in Aurora, Jerauld and Brule counties in South Dakota. The other location would be approximately **15 miles south of the town of Winner**, in Tripp County, South Dakota.

Representatives from RUS, Western and PrairieWinds will be available to answer your questions, offer more information about the proposed project and take your comments. Your comments will help define the scope of the Environmental Impact Statement.

PLEASE JOIN US

April 28, 2009, 4:00 p.m. to 7:00 p.m.
Holiday Inn Express & Suites
1360 E Highway 44
Winner, SD 57580

April 29, 2009, 4:00 p.m. to 7:00 p.m.
Commerce Street Grille
118 S Main Street
Plankinton, SD 57368

NEED MORE INFORMATION?

Liana Reilly
Western Area Power Administration
Corporate Services Office
A7400 P.O. Box 281213
Lakewood, Colorado 80228-8213
email: sdprairiewinds@wapa.gov
Phone: 1-800-336-7288

Western AREA POWER ADMINISTRATION

USDA Rural Development

Or visit the Project Web site at:
www.wapa.gov/transmission/sdprairiewinds.htm

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Appendix F

Native American Tribe Letter and Recipient List

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Department of Energy
Western Area Power Administration
Upper Great Plains Customer Service Region
P.O. Box 35800
Billings, MT 59107-5800

SEE ATTACHED LIST

Dear Honorable Chairperson, Mr. Lester Thompson:

Western Area Power Administration (Western), a power-marketing agency of the U.S. Department of Energy, has received a request to interconnect its transmission system near Wessington Springs, South Dakota with a wind generating facility that has been proposed by PrairieWinds, SD1, Incorporated (PrairieWinds), a subsidiary of Basin Electric. PrairieWinds has applied for financial assistance for the proposed project from the Rural Utility Service (RUS), an agency which administers the U.S. Department of Agriculture's Rural Development Utilities Programs. Western and RUS are considering these respective requests thereby making the project an undertaking subject to review under Section 106 of the National Historic Preservation Act (NHPA) and its implementing regulations (36 CFR Part 800). In accordance with 36 CFR § 800.2(a)(2), Western will serve as the lead agency for the purposes of Section 106 review.

The purpose of this letter is to inform you of the proposed project and to provide notice that Western and RUS intend to prepare an Environmental Impact Statement (EIS) addressing their respective Federal actions. This letter also serves to initiate Government-to-Government consultation. With this letter, Western and RUS invite your participation in the reviews conducted under the National Environmental Policy Act (NEPA) and Section 106 of NHPA..

The proposed PrairieWinds project would involve the installation and operation of a 150 megawatt (MW) wind energy facility that would feature 101 wind turbines (WTG). Each turbine generator would have a hub height of 262 feet and a turbine rotor diameter of 252 feet. The total height of each wind turbine would be 389 feet with a blade in the vertical position. The towers would be constructed of tubular steel, approximately 15 feet in diameter at the base, with internal joint flanges. The color of the towers and rotors would be standard white or off-white. During construction, a work/staging area at each turbine would include the crane pad and rotor assembly area, temporarily disturbing an area about 190 feet by 210 feet.

Each wind turbine would be connected by a service road for access and a 34.5 kilovolt (kV) electrical collection system that would ultimately route the power from each turbine to a central collector substation, where voltage would be stepped up for interconnection to Western's transmission system. About 30 to 40 miles of new access roads would be built to facilitate both construction and maintenance of the turbines. Approximately 25 to 35 miles of existing roads would be used and, where appropriate, improved.

Two sites for the wind generation facility are under consideration (see enclosed map). One site is located on about 37,000 acres about 15 miles north of White Lake, South Dakota, within Brule, Aurora, and Jerauld counties, South Dakota. Under this alternative, a new 230-kV transmission line would be required to deliver the power from the collector substation(s) to a

new 230-kV Western interconnection point at Western's Wessington Springs Substation, located in Jerauld County. The Wessington Springs Substation is located approximately 9 to 12 miles from the proposed collector substation(s). The proposed line would be built using wood or steel H-frame (two pole) structures or steel single-pole structures. The structures would be about 85 to 95 feet high and span about 800 feet.

The other alternative site, near Winner entirely in Tripp County, South Dakota, would be located within an area about 83,000 acres and require 34.5-kV to 115-kV collector substation(s) as well as a 115-kV transmission line to interconnect to Western's existing 115-kV Winner Substation. Other facilities would be similar to those described for the first alternative site above.

There is a chance that the final interconnection studies will conclude that other transmission facilities, such as network upgrades remote from the project site, would be required. If it is determined that other facilities are needed to support the interconnection request, Western will complete the appropriate level of environmental review.

Western and RUS are serving as co-lead Federal agencies under NEPA for preparation of the EIS. With this notice, you are invited to be cooperating agency. Designated cooperating agencies have certain responsibilities to support the NEPA process, as specified at 40 CFR 1501.6 (b).

Cultural resources are among the important environmental resources that will be addressed during the planning and the preparation of the EIS for the proposed project. We want to ensure that any important cultural and natural resources and/or places with traditional cultural significance for your Tribe within the project area are considered and addressed in the NEPA and Section 106 reviews. At this time, we would appreciate receiving any information that you would be willing to share with us on any unique, special, ethnographic, or archaeological resources or areas in or near the proposed Project. If you are aware of any other Tribes, individuals, or tribally affiliated organizations that should be consulted regarding this project, please let us know. A list of the other Tribes receiving this invitation to government-to-government consultation is enclosed.

Western and RUS are conducting scoping, including public scoping meetings, to ensure that interested members of the public, potentially affected landowners and lessees, and Federal, state, local, and tribal agencies have an opportunity to provide input on the scope of the EIS and the alternatives that will be addressed in the EIS. Western, RUS, and Project representatives at the scoping meetings will provide information about the proposed project, answer questions, and will take comments from interested parties. Western and RUS request that you comment on the proposal, offer suggestions to improve the proposal and suggest alternative actions. Please identify any issues of concern about potential environmental impacts. Written comments may be left with one of the Western or RUS representatives at the scoping meeting, or may be provided by fax, e-mail or the U.S. Postal Service to Ms. Liana Reilly or Steve Tromly, or by mailing the enclosed addressed response sheet.

Western will coordinate its compliance with Section 106 and its implementing regulations (36 CFR Part 800) with the steps taken to meet the requirements of NEPA. As part of this effort, Western will

use its NEPA procedures for public involvement to meet its responsibility to seek and consider the views of the public in Section 106 review, pursuant to 36 CFR § 800.2(d).

The open-house public scoping meetings will be held at the Holiday Inn Express and Suites, 1360 East Highway 44, in Winner South Dakota, on April 28, 2009, and the Commerce Street Grille, 1218 North Main Street, in Plankinton, South Dakoka on April 29, 2009. You may attend a meeting of your choosing at any time between 4 and 7 p.m. You will have the opportunity to view the proposed project and NEPA process displays and other information.

If you wish to be added to the project's mailing list and/or receive a copy of the Draft EIS, please return the response sheet or contact Ms. Liana Reilly at the phone number or address listed below. Comments on the project scope and alternatives should be received by May 15, 2009, to be considered in defining the scope for the EIS. Comments on the proposed project will be accepted and considered throughout the NEPA process.

We would like to obtain input to understand any issues that you or your Tribe believes are important. We will also follow up with a telephone call to discuss issues and, if requested, arrange a site visit. Please address comments, questions or concerns to Ms. Liana Reilly or Mr. Steve Tromly, at the addresses below.

Ms. Liana Reilly
NEPA Document Manager
Western Area Power Administration
Natural Resource Office
12155 West Alameda Parkway
Lakewood, CO 80228-8213
Phone: (720) 962-7253
Fax: (720) 962-7263
E-mail: reilly@wapa.gov

Mr. Steve Tromly
Native American Liaison
Western Area Power Administration
Natural Resource Office
12155 West Alameda Parkway
Lakewood, CO 80228-8213
Phone: (720) 962-7256
Fax: (720) 962-7263
E-mail: tromly@wapa.gov

We look forward to hearing from you.

Sincerely,

Nicholas J Stas

Nick Stas
Environmental Manager

Enclosures

cc:

Mr. Dennis Rankin
Project Manager
Engineering and Environmental Staff
Rural Utilities Service, Utilities Program
1400 Independence Ave. SW, Mail Stop 1571
Washington D.C. 20250-1571

N. Stas, B0400
R. O'Sullivan, B0400
D. Kluth, B0400
L. Reilly, A7400, Lakewood, CO
S. Tromly, A7400, Lakewood, CO
D. Swanson, A7400, Lakewood, CO

South Dakota PrairieWinds Project Nation-to-Nation Consultation List
(list of recipients in random order)

Mr. Kevin Jensvold, Chairperson
Upper Sioux Indian Community

CC
Mr. Scott Larson
Upper Sioux Indian Community

Ms. Jean Stacy, President
Lower Sioux Indian Community

CC
Ms. Pamela Halverson, THPO
Lower Sioux Indian Community

Ms. Myra Pearson, Chairwoman
Spirit Lake Tribal Council

Mr. Mike Salvage, Chairman
Sisseton-Wahpeton Dakota Nation

CC
Ms. Dianne Derosiers, THPO
Sisseton-Wahpeton Oyate

Mr. Joshua Weston, President
Flandreau Santee Sioux Executive Committee

Mr. Robert Cournower, Chairperson
Yankton Sioux Tribal Business and
Claims Committee

CC
Faith Spotted Eagle
Cultural Resources

Mr. Roger Trudell, Chairman
Santee Sioux Tribe of Nebraska

CC
Mr. Robert Campbell, Councilman
Santee Sioux Tribe of Nebraska

Mr. Rodney Bordeaux, President
Rosebud Sioux Tribe

CC
Mr. Russell Eagle Bear, THPO
Rosebud Sioux Tribe of Indians

Mr. Lester Thompson, Jr., Chairman
Crow Creek Sioux Tribe

Mr. Harold Frazier, Chairman
Cheyenne River Sioux Tribe

CC
Mr. Albert LeBeau, THPO
Cheyenne River Sioux Tribe

Mr. Michael B. Jandreau, Chairman
Lower Brule Sioux Tribe

CC
Scott Jones, Director Cultural Resources
Lower Brule Tribe

Mr. Ron His-Horse-is Thunder
Standing Rock Sioux Tribe

CC
Mr. Tim Mentz, THPO
Standing Rock Sioux Tribe

Mr. Curley Youpee, THPO
Ft. Peck Tribes

Tex Hall, Chairman
Three Affiliated Tribes Business Council

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Appendix G

Interagency / Scoping Meeting Materials and Scoping Meeting Sign-in Sheets

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South Dakota PrairieWinds Project Environmental Impact Statement

The NEPA Process

An Environmental Impact Statement (EIS) is being prepared under the direction of the U.S. Department of Energy (DOE), Western Area Power Administration (Western) and the U.S. Department of Agriculture, Rural Utilities Service (RUS) for the South Dakota PrairieWinds Project . The project proponent seeks an interconnection with Western and financing from RUS, and thus an EIS will be developed in accordance with National Environmental Policy Act (NEPA) requirements and agencies' implementing regulations.

Public involvement is part of the NEPA environmental review process. The public participation effort focuses on providing information to and gathering input from the public. You will have numerous opportunities to participate in the decision-making process as shown on the figure to the right.

How you can participate

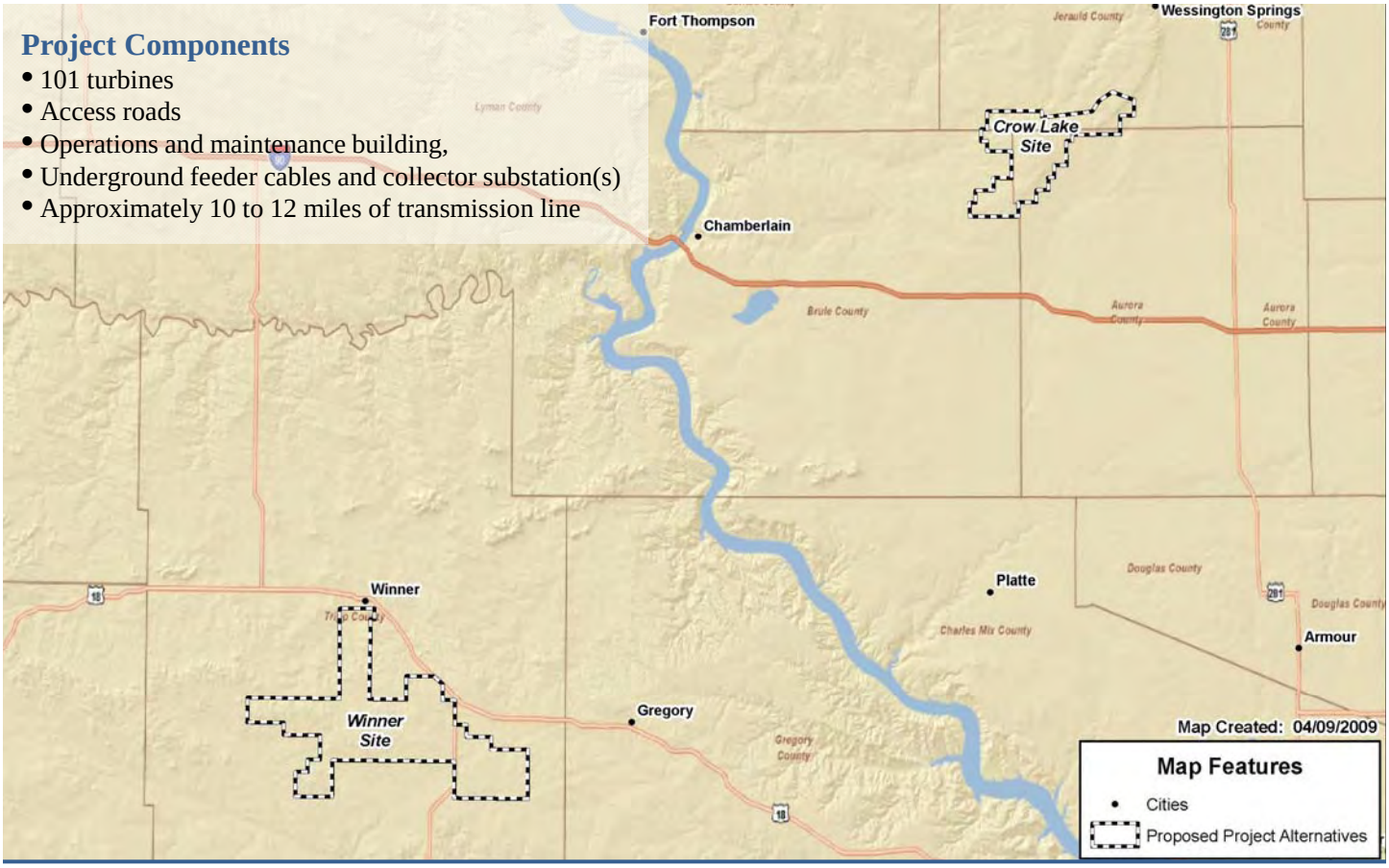
- Attend a public meeting. The meeting will provide the opportunity to ask questions, express concern, and submit written comments.

- Participate and provide comments during scoping as well as during the public review of the EIS. The availability of the Draft EIS and Final EIS will be announced. If requested, you will be provided the Draft EIS and Final EIS for review when completed.

- Designate on a comment form that you would like to be kept informed of the ongoing progress of this project and be included on the mailing list.

For more information on the proposed project:

Call the Project Phone Number: (800) 336-7288
Send an e-mail to the Project E-mail: sdprairiewinds@wapa.gov
Visit the Project Website: http://www.wapa.gov/sdprairiewinds.htm



Project Description

PrairieWinds SD1, Inc. (PrairieWinds), a wholly owned subsidiary of Basin Electric Power Cooperative (Basin Electric), is proposing to construct a new 151.5-megawatt (MW) wind energy facility at one of two locations in south-central South Dakota (see map to the right). Project components would include:

Power from the facility would be supplied to Basin Electric's customers through an interconnection with Western's transmission system. RUS is considering financing the project. Once environmental permitting is complete, and if the agency decisions are to go forward with the project, construction would begin Fall 2010/Winter 2010. Facility commercial operation is anticipated to begin in late 2010 or early 2011.

Project Purpose and Need

Incentives and regulations to encourage or require the generation of power from renewable or low environmental impact resources are being actively considered and/or implemented within the Basin Electric member service areas. A number of proposals for national Renewable Portfolio Standards (RPS) are pending in Congress.

Basin Electric's Participation: With members in nine states, Basin Electric recognizes the need for additional renewable energy capacity to service forecasted member load growth demands and to meet state mandated RPS. A 151.5-MW wind energy facility was determined to be the least-cost renewable resource option to satisfy these requirements.

PrairieWinds's Participation: A subsidiary of Basin Electric, and the project applicant. To be the owner and operator of the proposed project.

RUS's Participation: Co-lead agency for the EIS process, providing oversight of the NEPA process and preparation of the EIS. They are also considering granting financing assistance.

Western's Participation: Co-lead agency for the EIS process, providing oversight of the NEPA process and preparation of the EIS. They are also considering approval of an interconnection request.

Note, that consultation is occurring and Native American Tribes and agencies with jurisdiction or special expertise have been invited to be cooperating agencies

South Dakota PrairieWinds Project Environmental Impact Statement
Scoping Process

What is Scoping?

The Council on Environmental Quality's scoping definition (Sec. 1501.7) states:

> *There shall be an early and open process for determining the scope of issues to be addressed and for identifying the significant issues related to a proposed action. This process shall be termed scoping.*

Scoping is the process by which Federal agencies invite other agencies, organizations, and the public to provide input on the scope of a project. More specifically, it is the process that Federal agencies utilize to get input on the issues and effects related to a proposed action and alternatives. The items identified are then addressed in an Environmental Impact Statement (EIS). The EIS is addressed in accordance with National Environmental Policy Act (NEPA) requirements and agencies' implementing regulations.

Scoping and the South Dakota PrairieWinds Project:

Western Area Power Administration (Western), an agency within the U.S. Department of Energy; Rural Utilities Service (RUS), an agency within the U.S. Department of Agriculture (USDA); are conducting scoping for the proposed South Dakota PraireWinds Project. Throughout the scoping period, written comments may be submitted to the address below. As a part of the scoping process, two scoping meetings are being held for this project. At these meetings, Western, RUS and PrairieWinds SD1, Inc. (PrairieWinds, the Applicant) representatives will be available for one-on-one discussions, to provide information about the proposed project, answer questions, and take verbal and written comments from interested parties.

Ways to Provide Comments:

We would appreciate any comments you have concerning the proposed project. We would like to ensure that important environmental concerns are addressed and that natural resources and places of interest within the project area are considered in the EIS. 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. This is not your only opportunity to submit comments on the EIS. There will be additional opportunities for the public to provide input during the development of the EIS. Comments could be submitted through the project's web address, or sent by letter, fax or e-mail. Written comments on the scope of the EIS should be addressed to **Ms. Liana Reilly**, at the address listed below.

Ms. Liana Reilly
Document Manager
Western Area Power Administration
Corporate Services Office, A7400
P.O. Box 281213
Lakewood, Colorado 80228-8213
Fax: (720) 962-7263

Call the Project Phone Number: (800) 336-7288
Send an e-mail to the Project E-mail: sdprairiewinds@wapa.gov

Visit the Project Website: http://www.wapa.gov/sdprairiewinds.htm

How to Receive Additional Information:

For more information about the project, or if you would like to be included on the Project mailing list and/or to receive copies of the Draft and Final EIS, please provide your contact information to Ms. Liana Reilly, at the address above. For information on RUS financing please contact Mr. Dennis Rankin, Project Manager, Engineering and Environmental Staff, Rural Utilities Service, Utilities Program, 1400 Independence Ave. SW, Mail Stop 1571 Washington D.C. 20250-1571 telephone: (202) 720-1953, fax: (202) 720-0820 or e-mail: dennis.rankin@wdc.usda.gov.

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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

Name:	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).

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

Please fold in thirds and staple

Affix postage here

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

National Environmental Policy Act

The U.S. Department of Energy (DOE) prepared this brochure to encourage and help you to participate in the National Environmental Policy Act (NEPA) process. All Federal agencies must comply with NEPA, but their procedures vary. This brochure describes DOE's NEPA process, focusing on your role in DOE's preparation of Environmental Impact Statements (EISs).

What is NEPA?

NEPA is a Federal law that serves as the Nation's basic charter for environmental protection. It requires that all Federal agencies consider the potential environmental impacts of their proposed actions. NEPA promotes better agency decisionmaking by ensuring that high quality environmental information is available to agency officials and the public before the agency decides whether and how to undertake a major Federal action. Through the NEPA process, you have an opportunity to learn about DOE's proposed actions and to provide timely information and comments to DOE.

To implement NEPA, all Federal agencies follow procedures issued by the President's Council on Environmental Quality in the Code of Federal Regulations (40 CFR Parts 1500-1508). DOE also follows its own supplementary procedures, found in 10 CFR Part 1021.

How Does DOE Prepare an EIS?

The EIS process consists of several steps, each with opportunities for you to be involved.

- **Notice of Intent.** First, DOE publishes a Notice of Intent to prepare an EIS in the *Federal Register* and makes local announcements. This notice states the need for action and provides preliminary information on the EIS scope, including the alternative actions to be evaluated, the kinds of potential environmental impacts to be analyzed, and related issues. The Notice of Intent also serves as the beginning of the next step, the "scoping process."

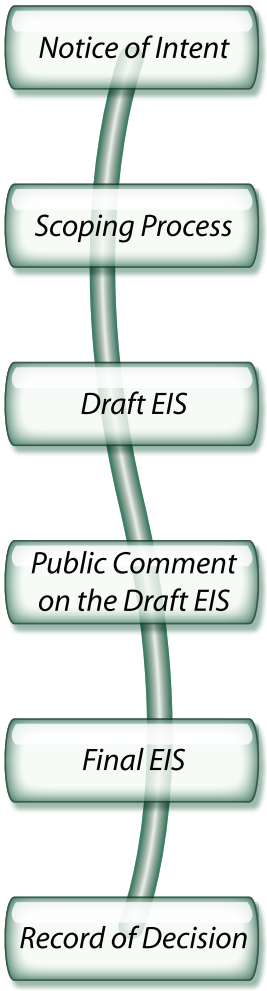
TIP: The Notice of Intent explains how you can participate in the scoping process and provides information about dates and locations of public meetings.

- **Scoping Process.** DOE requests your comments on the scope of the EIS. What alternatives should be evaluated? What potential environmental impacts should be analyzed? DOE's scoping process will last at least 30 days, with at least one public meeting.

TIP: During the scoping process, tell DOE what EIS information you would like to receive (e.g., a summary of the EIS or the full document on CD or on paper).

- **Draft EIS.** DOE considers scoping comments in preparing a Draft EIS. An EIS (Draft or Final) analyzes and compares the potential environmental impacts of the various alternatives, one of which is always a "no action" alternative. The EIS also discusses ways to avoid or reduce adverse impacts. A Draft EIS will identify DOE's preferred alternative(s) if known at the time.

TIP: DOE EIS schedules and related NEPA information are available at *http://www.eh.doe.gov/nepa*. DOE often has EIS-specific Web sites as well.



- **Public Comment on the Draft EIS.** After DOE issues a Draft EIS, the U.S. Environmental Protection Agency (EPA) publishes a Notice of Availability in the *Federal Register* to begin the public comment period, which will last at least 45 days. DOE also will announce details regarding how you may comment on the Draft EIS, either orally at a public hearing (at least one must be held) or in writing.

TIP: Check your local paper, the DOE NEPA Web site (*http://www.eh.doe.gov/nepa*, click on "What's New" or "NEPA Public Participation Calendar"), or other DOE notices for information about public hearings and ways to submit comments.

- **Final EIS.** DOE considers all timely public comments on the Draft EIS in preparing the Final EIS, which must respond to such comments. The Final EIS identifies DOE's preferred alternative(s). After DOE issues the Final EIS, EPA publishes a Notice of Availability in the *Federal Register*.

- **Record of Decision.** DOE must wait at least 30 days after the EPA Notice of Availability of the Final EIS before issuing a Record of Decision. A Record of Decision announces and explains DOE's decision and describes any commitments for mitigating potential environmental impacts.

TIP: DOE publishes Records of Decision in the *Federal Register* and makes them available on the DOE NEPA Web site. You may also ask DOE to send you a copy.

How Does NEPA Work?

Early in its planning process for a proposed action, DOE considers how to comply with the National Environmental Policy Act (NEPA). The appropriate level of review depends on the significance (i.e., the context and intensity) of the potential environmental impacts associated with the proposed action. There are three levels of NEPA review:

- **Environmental Impact Statement (EIS) –** For major Federal actions that may significantly affect the quality of the human environment, NEPA requires preparation of an EIS. An EIS is a detailed analysis of the potential environmental impacts of a proposed action and the range of reasonable alternatives. Public participation is an important part of the EIS process.

- **Environmental Assessment (EA) –** When the need for an EIS is unclear, an agency may prepare an EA to determine whether to prepare an EIS or to issue a Finding of No Significant Impact. An EA is a brief analysis. DOE's procedures provide notification and comment opportunities for host states and tribes. DOE also may provide notification and comment opportunities for other interested people. DOE then considers any comments received, makes revisions as appropriate, and issues the EA.

- **Categorical Exclusion –** DOE's NEPA regulations list classes of actions that normally do not require an EIS or an EA because, individually or cumulatively, they do not have the potential for significant environmental impacts. Examples are information gathering activities and property transfers when the use is unchanged.

How Can I Learn More?

We encourage you to learn more about NEPA, the EIS process, and DOE's current NEPA activities by visiting or contacting the following:

- DOE's NEPA Web site at *http://www.eh.doe.gov/nepa* – to learn about upcoming opportunities to participate in DOE's NEPA process, download DOE NEPA documents, and find requirements and guidance that DOE follows for NEPA implementation.

- DOE's Office of NEPA Policy and Compliance at 1-800-472-2756 (toll-free) – to leave a message regarding EIS-specific or general NEPA information.

- The Council on Environmental Quality's NEPAnet at *http://ceq.eh.doe.gov/nepa/nepanet.htm* – for government-wide NEPA information.

Office of NEPA
Policy and Compliance

Printed on recycled paper

DOE, NEPA, and You

A Guide to Public Participation

South Dakota PrairieWinds
Wind Energy Project



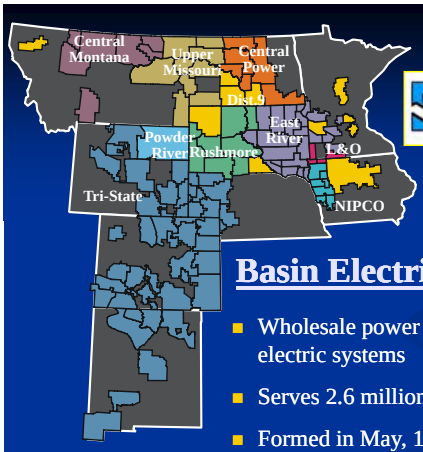
USDA Rural Development | Basin Electric Power Cooperative | PrairieWinds Energy in Motion | Western Area Power Administration

Outline of Presentation

- Basin Electric Information
- Proposed Project Purpose and Need
- Proposed Project Details
- Permitting Process and NEPA Schedule
- Comparison of Wind Speed and Energy Generation
- Example Photos
- Additional Considerations
- Scoping Meeting Format

South Dakota PrairieWinds
Wind Energy Project

Basin Electric Information



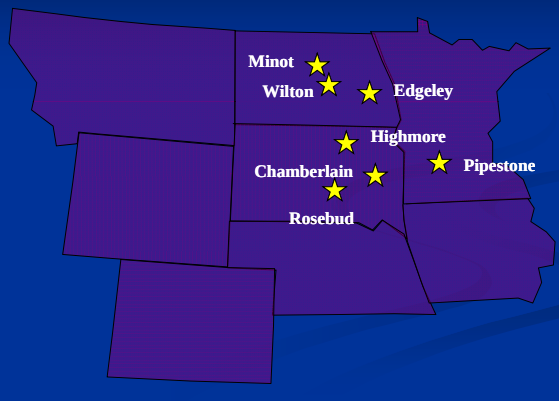
BASIN ELECTRIC POWER COOPERATIVE
Your Touchstone Energy® Cooperative

Basin Electric Information:

- Wholesale power supplier to 126-member rural electric systems
- Serves 2.6 million consumers
- Formed in May, 1961 as supplemental power supplier
- Consumer-owned; consumer-controlled

Basin Electric's Wind Portfolio

Existing Wind Energy Generation – 136 MW



South Dakota PrairieWinds

Wind Energy Project

Proposed Project Purpose and Need

Purpose and Need

- Current incentives/regulations encourage or require power from renewable or low environmental impact resources
- Proposals in Congress for national Renewable Portfolio Standards (RPS)
- Basin Electric needs additional renewable energy capacity to serve forecasted growth demands and meet state-mandated RPS
  - A 150 MW wind project was determined to be the best alternative to satisfy these requirements
  - Applicant – PrairieWinds SD1, Incorporated, a wholly owned subsidiary of Basin Electric

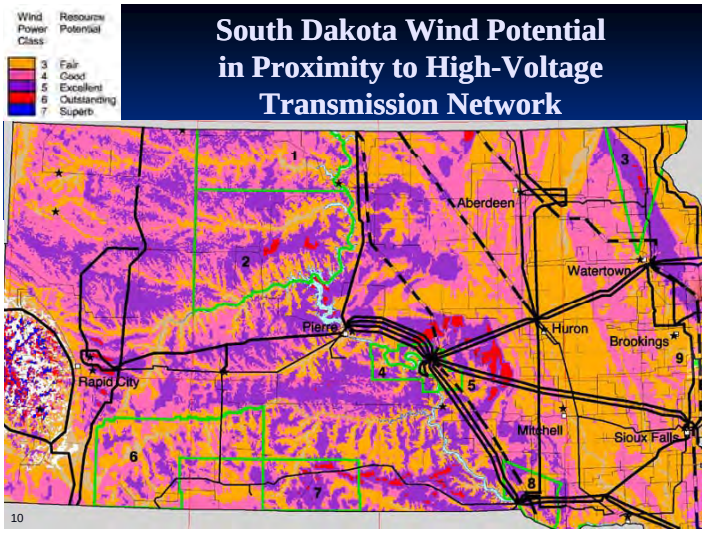
Agencies Involved

- Western's Action – Basin Electric has requested to interconnect the proposed Project with Western's transmission system
- RUS's Action – PrairieWinds has requested financing for the proposed Project from the RUS
- Both agencies intend to jointly prepare an environmental impact statement (EIS) for the Project

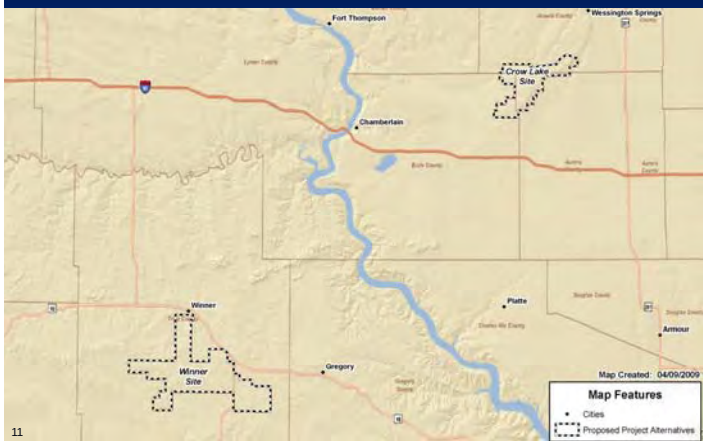
South Dakota PrairieWinds
Wind Energy Project

Proposed Project Details

South Dakota Wind Potential in Proximity to High-Voltage Transmission Network



Proposed Project Alternatives



Project Details

- Will generate approximately 150 MW
- 2 site alternatives - Project components:
  - 101 turbines,
  - Access roads,
  - O&M building,
  - Underground feeder cables and collector substation(s),
  - Approximately 10 to 12 miles of transmission line
- Fall 2010/Winter 2010 – commercial operation

GE 1.5sle Turbine Specifications

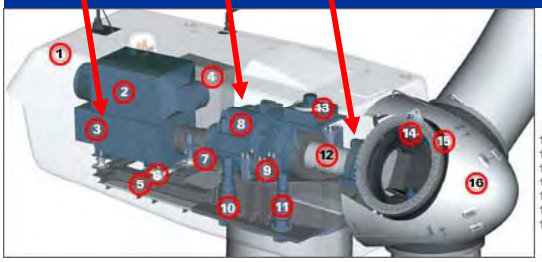
- Variable speed – blades rotate at 12 to 23 RPM
- Start-up wind speed: approximately 7 to 8 MPH
- Shut-down wind speed: approximately 56 MPH
- Optimum wind speed: 26 to 55 MPH
- Operational temperature range: - 20º to 104º F
- Variable pitch blades
- High tech electronic controls
- 3 fiberglass blades (14,000 lbs per blade)
- Hub height: 262 feet
- Blade length:135 feet

3 Major Components of Turbines

Generator

Gearbox

Rotor/Blades/Main Shaft



South Dakota PrairieWinds

Wind Energy Project

Permitting Process and NEPA Schedule

Permitting Process –

Scoping and environmental analysis

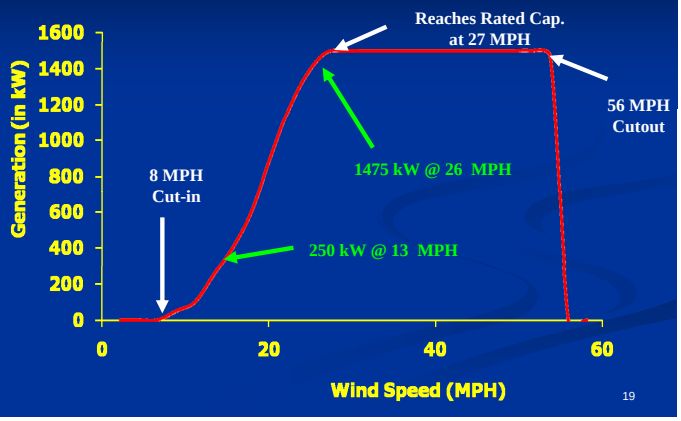
- NEPA
  - Scoping to gain agency, organization, and public input
  - Environmental Impact Statement
  - Agency involvement:
    financing – RUS
    interconnection – Western
- South Dakota Public Utilities Commission – siting approval
- Local zoning
- Other pre-construction permits and authorizations

South Dakota PrairieWinds
Wind Energy Project

Comparison of Wind Speed and Energy Generation

Power Curve:

A 1 MPH change in annual average speed can change production by 15%



South Dakota PrairieWinds
Wind Energy Project

Example Photos:

- Turbine Construction
- Collector Substation
- Transmission Structures
- Facility Layout

Initial Construction Step: Complete Foundation

21

Construction of Turbines

22

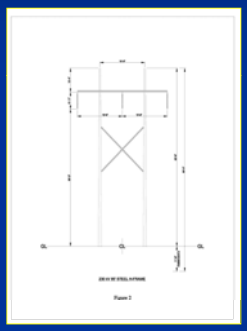
Completed Turbines

23

Collector Substation
(Example Only)

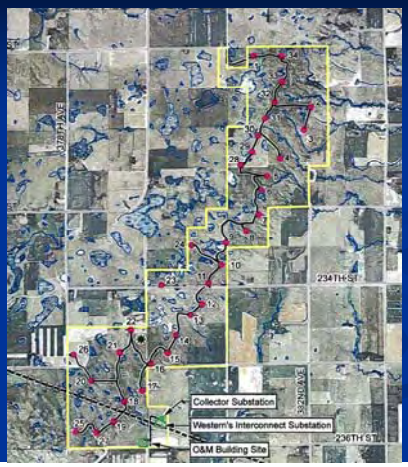
24

Typical Transmission Structure



Facility Layout

(Example Only)



South Dakota PrairieWinds
Wind Energy Project

Additional Considerations:

- **Potential Local Benefits**
- **Schedule and Cost**

Potential Local Benefits

- **Project construction**
  - **Increase demand for local lodging, meals and construction materials**
  - **225 - 250 temporary jobs**
- **Project operation**
  - **10-12 permanent jobs**
- **Increase tax base**
- **Increase renewable energy capacity, and system reliability**

Proposed Schedule/Cost

- Obtain permits/approvals – ongoing
- Summer 2010 – begin construction
- Fall 2010/Winter 2010 – commercial operation
- Project cost estimate = $350 million

South Dakota PrairieWinds
Wind Energy Project

Scoping Meeting Format

Open House Scoping Meeting

- Please sign in at the registration table
- Feel free to visit the various stations around the room
- Ask questions
- Provide input
- Your comments are important to this process

Thank You

Welcome to:

South Dakota PrairieWinds Project

Scoping Meeting

USDA Rural Development

BASIN ELECTRIC POWER COOPERATIVE

PRAIRIEWINDS ENERGY IN MOTION

Western AREA POWER ADMINISTRATION

Outline of Presentation

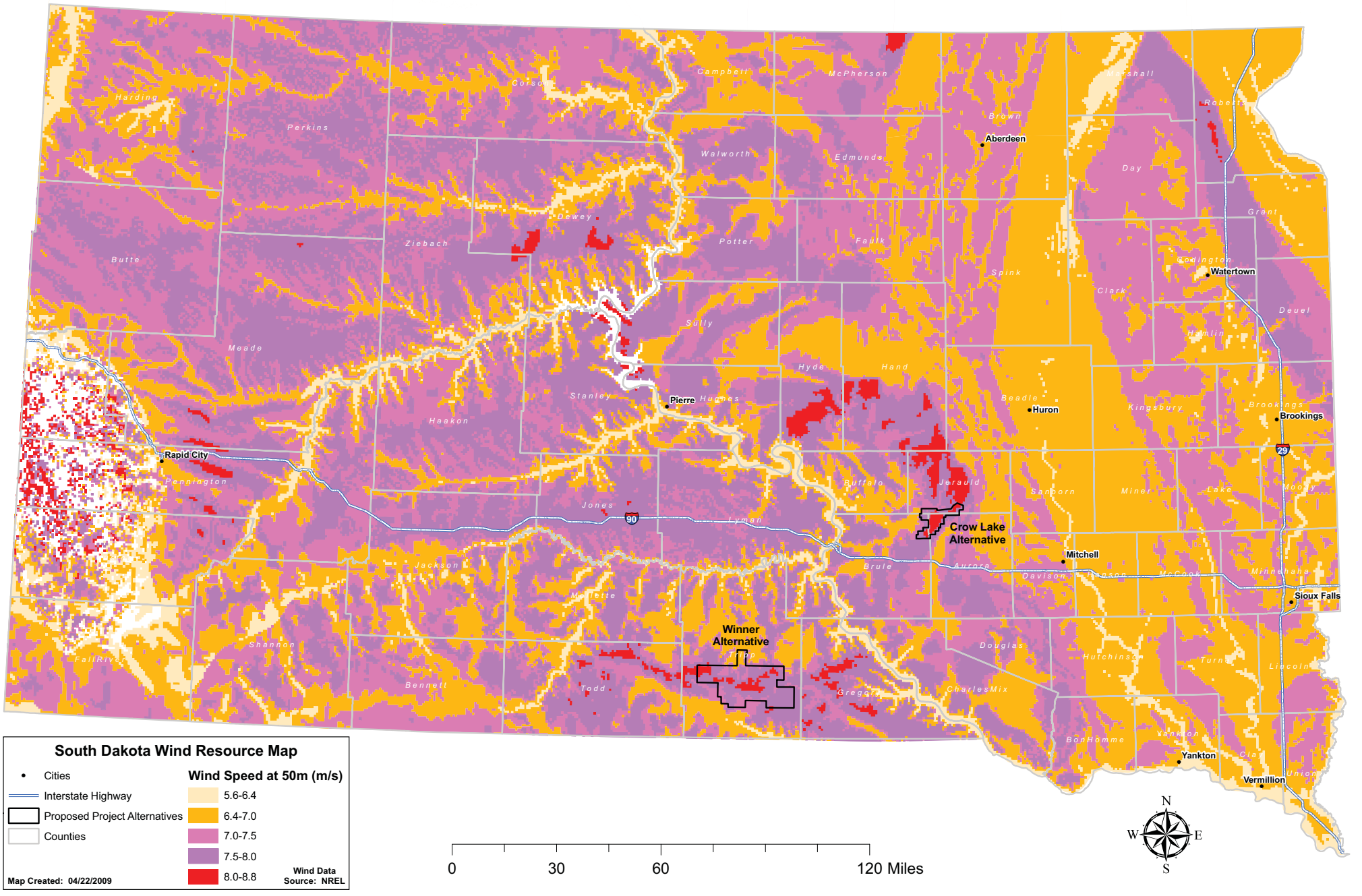
- Basin Electric Information
- Proposed Project Purpose and Need
- Proposed Project Details
- Permitting Process and NEPA Schedule
- Comparison of Wind Speed and Energy Generation
- Example Photos
- Additional Considerations
- Scoping Meeting Format

Basin Electric's Project Objectives

Renewable Energy Goals

- **Meet current incentives/regulations that encourage or require power from renewable or low environmental impact resources**
- **Conform with proposals in Congress for national Renewable Portfolio Standards (RPS)**
- **Basin Electric needs additional renewable energy capacity to serve forecasted growth demands and meet state-mandated RPS**
  - **A 150 MW wind project was determined to be the best alternative to satisfy these requirements**
  - **Applicant – PrairieWinds SD1, Incorporated, a wholly owned subsidiary of Basin Electric**

USDA Rural Development | BASIN ELECTRIC POWER COOPERATIVE | PRAIRIEWINDS ENERGY IN MOTION | Western AREA POWER ADMINISTRATION


South Dakota Wind Resource Map
Cities
Interstate Highway
Proposed Project Alternatives
Counties
Wind Speed at 50m (m/s)
5.6-6.4
6.4-7.0
7.0-7.5
7.5-8.0
8.0-8.8
Map Created: 04/22/2009
Wind Data Source: NREL
Crow Lake Alternative
Winner Alternative
Aberdeen
Watertown
Pierre
Huron
Brookings
Rapid City
Mitchell
Sioux Falls
Yankton
Vermillion
0
30
60
120 Miles
N
W
E
S

Preliminary siting parameters for turbine locations:

- ❑ Wind potential and topography
- ❑ Ability to lease contiguous parcels of land
- ❑ Minimum distance of 400 feet from section lines or existing roads
- ❑ Minimum distance of 1000 feet from occupied residences
- ❑ Minimum distance of 400 feet from existing transmission line
- ❑ Avoidance of hydric soils areas
- ❑ Siting on USFWS grasslands easements was near edges to minimize impact
- ❑ 1000 to 2000-foot minimum between turbine locations within the predominant wind direction
- ❑ Avoid siting within existing micro-wave paths

Preliminary siting parameters for transmission line locations:

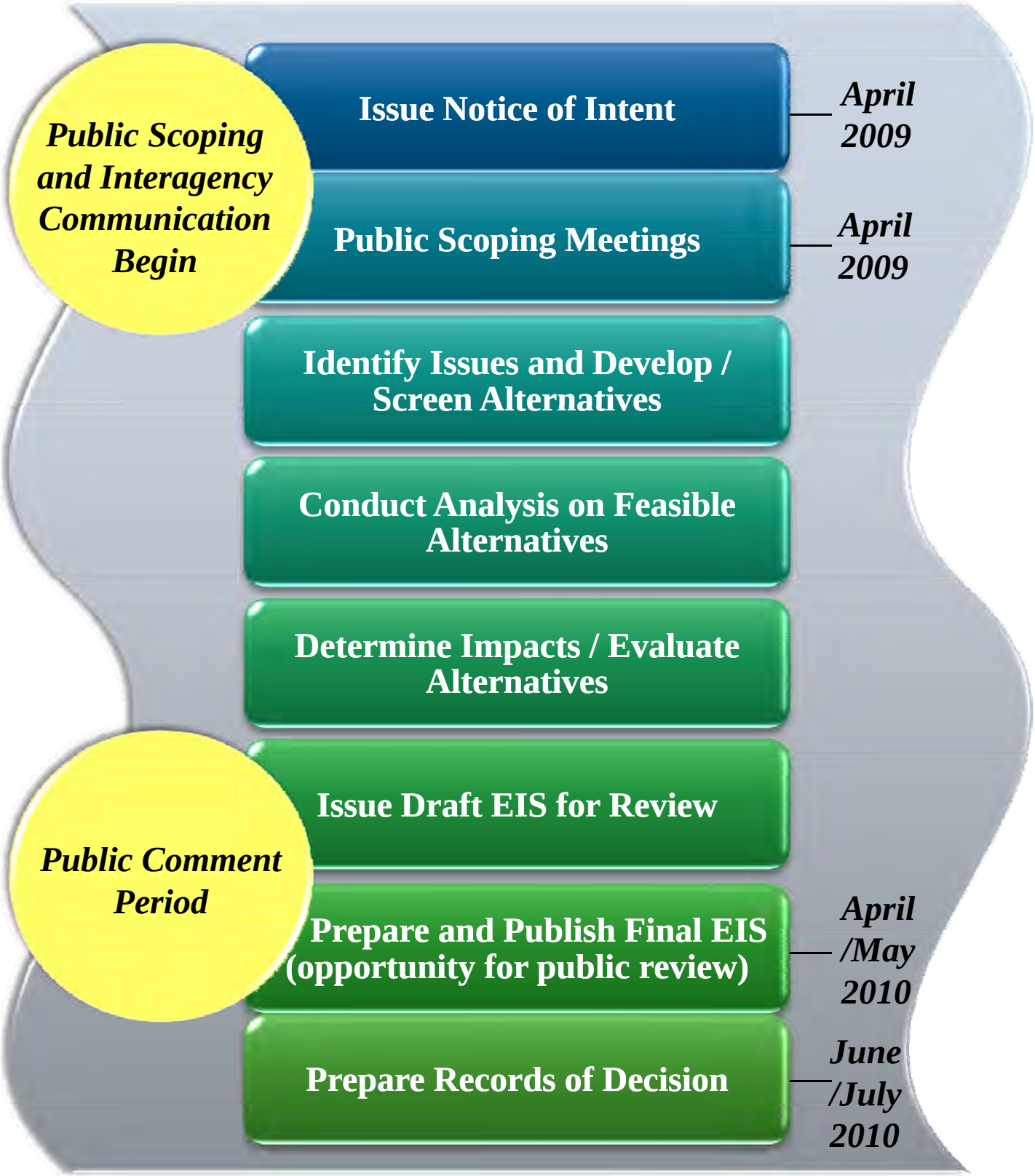
- ❑ Minimization of transmission line length
- ❑ Consider right-of-way requirements and availability of contiguous parcels of land
- ❑ Land use considerations (i.e., potential visual impacts, proximity to residences, potential impact to agricultural activities, and existing/future land use)
- ❑ Environmental resource considerations such as potential impacts to sensitive resources (i.e., cultural resources, wildlife, vegetation, and wetlands
- ❑ Jurisdiction and regulatory considerations
- ❑ Consider airport height restrictions

Further siting analysis through EIS process:

- ❑ Geology, Soils, Paleontology, and Seismicity
- ❑ Water Resources
- ❑ Climate Change and Air Quality
- ❑ Biological Resources
- ❑ Wetlands/Riparian Areas
- ❑ Cultural Resources
- ❑ Land Use
- ❑ Transportation
- ❑ Recreation
- ❑ Visual Resources
- ❑ Noise
- ❑ Socioeconomics
- ❑ Environmental Justice
- ❑ Health and Safety

USDA Rural Development · Basin Electric Power Cooperative · PrairieWinds Energy in Motion · Western Area Power Administration

ENVIRONMENTAL IMPACT STATEMENT PROCESS



USDA Rural Development

BASIN ELECTRIC POWER COOPERATIVE
A Touchstone Energy® Cooperative

PRAIRIE WINDS ENERGY IN MOTION

Western AREA POWER ADMINISTRATION

Western's Role and Need for Agency Action

Who is Western?

- Agency within the USDOE
- Owns, operates and maintains transmission lines including lines near the proposed PrairieWinds project
- Markets federal hydroelectric power including power from power plants on the Missouri River

Why is Western involved?

- Evaluate interconnection request per its generator interconnection procedures
- Evaluate involvement
- Co-lead for NEPA process

USDA Rural Development | BASIN ELECTRIC POWER COOPERATIVE | PRAIRIE WINDS ENERGY IN MOTION | Western AREA POWER ADMINISTRATION

RUS's Role and Need for Agency Action

Who is RUS?

- Formerly the Rural Electrification Administration
- Agency within the USDA
- Delivers USDA's Rural Development Utilities Programs
- Makes loans/loan guarantees for electric distribution, transmission and generation facilities, telecommunication facilities and water and waste water facilities

Why is RUS involved?

- Evaluate financing request
- Evaluate engineering and technical aspects of the project
- Co-lead for NEPA process

South Dakota PrairieWinds Project
Environmental Impact Statement
Scoping Meeting
April 28, 2009 – Winner, SD

- Please Print -

First	Last	Street/PO Address, City, State, Zip	Email	Organization
JulieAnn	Farley			
Ray	Praveck			
Pam	Haukaas			
Ross	Demers			
Roni & Kate	DeMers			
Debe Tim	Moeller			
Richard	Hastlund			
Leonard	Heim			
Dan	Richtold			Winner Advocate

Information redacted for privacy

South Dakota PrairieWinds Project
Environmental Impact Statement
Scoping Meeting
April 28, 2009 – Winner, SD

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First	Last	Street/PO Address, City, State, Zip	Email	Organization
Mike	Rohde			Rancher
Virgil	Moody			Rancher + Tripp Co Comm.
Mark	Kinzer			Dairy
Ray	Bigelow			Farmer
Avis	FERWERDA			
Candy	ErkManthey			local farmer net
Ronald	Snethen			
John	HARTER			Rancher
Wayne	Meyer			Rancher

Information redacted for privacy

South Dakota PrairieWinds Project
Environmental Impact Statement
Scoping Meeting
April 28, 2009 – Winner, SD

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First	Last	Street/PO Address, City, State, Zip	Email	Organization
Daniel	Keszler			
Darrel	Kaiser			
[illegible]	[illegible]			
Earl	Vesely			
Tom	Kaiser			
DAN	PATMORE			
SCOTT	CONANT			
BILL	Stiles			
LYNDON	HOOPER			

Information redacted for privacy

South Dakota PrairieWinds Project
Environmental Impact Statement
Scoping Meeting
April 28, 2009 – Winner, SD

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First	Last	Street/PO Address, City, State, Zip	Email	Organization
Pete Jeannette	Long			Interested
Stan	Biek			
Alan	Stenske			mail.com
Lee	Woods			
Jim	Hoyle			
Roger	Larley			
Lowry	Waagen			
Andy	Peterson			
Matt + Belva	Shopene			

Information redacted for privacy

South Dakota PrairieWinds Project
Environmental Impact Statement
Scoping Meeting
April 28, 2009 – Winner, SD

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First	Last	Street/PO Address, City, State, Zip	Email	Organization
Doris	Miner			
Bill	Ferguson			Owner @ gwtc.net
Erwin	Barkhaus			
Rich	Shimek			
Greg	English			Tripp Co
Tony	Rogers			RST C
Keith	Gebhart			
STEVE	NOVOTNY			
GARY	Chaudhari			Choice Hotels

Information redacted for privacy

PRAIRIEWINDS ENERGY IN MOTION

South Dakota PrairieWinds Project
Environmental Impact Statement
Scoping Meeting

April 28, 2009 – Winner, SD

USDA Rural Development | Western Area Power Administration

- Please Print -

First	Last	Street/PO Address, City, State, Zip	Email	Organization
James	Foster	*Information redacted for privacy*		
Michelle	LaPointe			
Rene M.	Clifford			RST
Lue	Hanson			
Stan	Hanson			
Alvin	[illegible]			
Chan	Shippy			
Jack & Edna	Whetham			
Bob & Judy	Benson			

PrairieWinds
ENERGY IN MOTION

South Dakota PrairieWinds Project
Environmental Impact Statement
Scoping Meeting
April 28, 2009 – Winner, SD

- Please Print -

First	Last	Street/PO Address, City, State, Zip	Email	Organization
		Information redacted for privacy		

South Dakota PrairieWinds Project
Environmental Impact Statement
Scoping Meeting
April 28, 2009 – Winner, SD

- Please Print -

First	Last	Street/PO Address, City, State, Zip	Email	Organization
Arvalt	[illegible]			
Randy	Babcock			@goldenwest.net
Paul	Seppanen			Fagen, Inc
BRAD	Schramm			South Central Dev. Corp. Tripp Co. Office of development
Peggy	Myers			
TODD	MOSER			Fullerton Building Center.
Jack	Day			City
Cecil	Sachtjen			
Richard	Kirsch			City of Wessington Prop owner

Information redacted for privacy

South Dakota PrairieWinds Project
Environmental Impact Statement
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April 28, 2009 – Winner, SD

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First	Last	Street/PO Address, City, State, Zip	Email	Organization
Fred	Woods			
Monte	Hopkins			
Patricia	Hopkins			
Ron	Kyburz			
Alvin	Jacobs			
Rich	O'Bryan			
Frank	Emery			
Jerome	Olbrich			
Paul M	Johnson			

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PRAIRIEWINDS ENERGY IN MOTION

USDA Rural Development

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Western Area Power Administration

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First	Last	Street/PO Address, City, State, Zip	Email	Organization
Roger Betty	Cudmore	Information redacted for privacy		Farming
Scott	Parsley			East River
Lance	Witte			Wessington Springs School Dist.
Oscar	Thompson			Commissioner
SANDRA + Kevin	BRADWISCH			Councilwoman - White Lake
Dick	McQueen			Farmer
Trevor	Boyd			City Finance Officer Plankinton
J.P.	Studeny			South Dakota Mail
Jim	Headley			

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First	Last	Street/PO Address, City, State, Zip	Email	Organization
Paul	Borgmann	Information redacted for privacy	.net	
Lennie	Mielemann			
Dale	Sletten			
Deb	Nelthausen		am.com.	
WARREN	KARLEN		.com	
MARK	Hofer		tel.net	
Charles	Kornes		—	
Kris	Pursell		m	White Lake Economic Development
Ken	Cudmore			

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First	Last	Street/PO Address, City, State, Zip	Email	Organization
Gayle	Van Genderen			SD Mail Newspaper
David	Lambert			Regional Dev. Assn.
Jerry + Earlene	Bennett			owner
Richard + Gladys	Meier			
Gary	Brodkorb			Owner
Ron	Gillen			Brosz Engineering
Butch	[illegible]			Central Electric
Darold + Carol	Thomas			Central electric
Harold	Bickner			

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PrairieWinds
ENERGY IN MOTION

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First	Last	Street/PO Address, City, State, Zip	Email	Organization
PAUL	Muth			Muth Electric
Jeff	Peters			
Ellwyn	Nohr			
BENJAMIN	READY			SENATOR JOHN THUNE
Ed	Fett			Farm Bank
Judy	Lucht			
Michael	Gilbertz			
Mike	Gilbertz			
Marilyn	Reimnitz			

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First	Last	Street/PO Address, City, State, Zip	Email	Organization
Chris	Nelson	Information redacted for privacy		
Joe	Kutnow			
JERRY R	HIGGIN SR.			
Barbara Kroupa	Kroupa			
Darrel	Johnson			
GARY	Bradley			
RON	NELSON			JD CONCRETE
Kraig	Sinclair			
Mark	Heisinger			

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First	Last	Street/PO Address, City, State, Zip	Email	Organization
Henry	Kinsel			SD
Brad	Boisen			—
Ronald	Moller			SD
Dan	Petersen			
Gerald	Higgins Jr.			
Howard	Morrison			
Quinton	Burg			S. Dak
GAIL	ARNOTT			SD
Jim	Burg			SD

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First	Last	Street/PO Address, City, State, Zip	Email	Organization
Norman	Thompson			Farmer
Bette	Thompson			"
Austin	Kaus			Daily Republic
John	Deppe		sda.gov	NRCS RCD
HAROLD	HotchKiss			SEPTIC TANK CLEANING
Don	Salmen			
Vicky	Haug			
Charlotte	Braun			
Mark	Gerhardt			Rep. Stephanie Herseth Sandlin

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First	Last	Street/PO Address, City, State, Zip	Email	Organization
Karen + Dan	Meier			nct
Joan	Williams			City Council Plankinton
David	Reuland			of Education tesd.net
Kevin	Bradwisch			
Lawron	Bohr			Mayor of Plankinton
Vern	Hill			Supt City of Plankinton
Linda +1	Heath			
Duane	Wallrich			Central
Dave	City			Central

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First	Last	Street/PO Address, City, State, Zip	Email	Organization
DONNA	Weiland			
Marie	Johnson			
Vince				

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