

Basin Electric Power Cooperative Avian and Bat Protection Plan (ABPP)



**BASIN ELECTRIC
POWER COOPERATIVE**

A Touchstone Energy® Cooperative



Adoption and Approval of Basin Electric Power Cooperative's Avian and Bat Protection Plan

This plan is hereby adopted and approved this 18th day of April, 2013.

By:


Andrew M. Serri, CEO and General Manager of Basin Electric Power Cooperative

Version	Date Issued	Date Effective	Changes or Additions	Owner's Initials
1.0	04/05/2013	05/01/2013	Original	ENFD

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1.0 Introduction

Basin Electric Power Cooperative (Basin Electric) is one of the largest electric generation and transmission (G & T) cooperatives in the United States. Basin Electric, along with its subsidiaries, has long promoted the balance between environmental responsibility and providing affordable electricity to its members. This balance is a consideration during all activities of Basin Electric including but not limited to generation of electricity, developing, siting and building new projects, expansion and updating of current facilities, and building and maintaining transmission lines.

Basin Electric recognizes that necessary operations may impact the environment, including avian and bat species. Basin Electric has developed this Avian and Bat Protection Plan (ABPP) with the overall goal of minimizing avian and bat mortality. This ABPP attempts to identify and potentially remedy situations where negative impacts to avian and bat species may occur. In addition, it provides guiding principles for Basin Electric project developers to build mechanisms to minimize potential impacts to avian and bat species into projects. This ABPP also provides guidelines for training, a monitoring and reporting system, and quality control.

Basin Electric is subject to a number of state and Federal laws that protect avian and bat species. Among the Federal regulations are the Migratory Bird Treaty Act (MBTA), the Bald and Golden Eagle Protection Act (BGEPA) and the Endangered Species Act (ESA). These laws, and others, provide protection for some of the wildlife species that may come into contact with Basin Electric facilities and operations.

Basin Electric's ABPP addresses issues associated with overhead transmission lines such as roosting and collision as well as wind turbine disturbance and collision issues. Many of the environmental considerations, for example siting, are applicable to both transmission lines and wind farms. Sections of the ABPP may address concerns collectively or specifically directed to a particular structure or activity, depending upon applicability. While distribution lines also pose a risk to avian species, this document is intended for use by Basin Electric, and therefore, focuses on transmission lines and wind turbines only.

Basin Electric believes that environmental responsibility is a cooperative-wide issue. Therefore, the goal of this ABPP is to minimize the risks to avian and bat species from Basin Electric wind farms and transmission lines. Basin Electric believes that the development of an ABPP is an evolving process. As more data is collected, the ABPP will be modified to reflect the lessons learned as well as incorporating advances in research and technology. It is Basin Electric's hope that the ABPP will continue to expand, develop and improve as the knowledge regarding these issues within the industry advances and regulatory requirements change.

2.0 Cooperative Policy

Basin Electric is committed to a policy of environmental responsibility, coupled with providing reliable electricity in as low a cost manner as possible to cooperative members. This commitment extends to compliance with regulatory requirements protecting wildlife, obtaining and complying with all state and Federal permits, and making reasonable and prudent efforts to minimize the impact and mortality of avian and bat species while building and maintaining electric generation and transmission facilities.

This ABPP supports that commitment. It provides guidelines for the implementation of cooperative policy and provides a reference for project developers. Through this ABPP, Basin Electric commits to the following:

- Execute the policies and guidelines outlined in this ABPP to the extent practicable while ensuring the health and safety of employees;
- Execute the policies and guidelines outlines in this ABPP to the extent practicable under engineering and economic constraints;
- Act in accordance with all applicable state and Federal regulations regarding avian and bat species;
- Provide necessary training for applicable Basin Electric personnel in methods to minimize impact, identify species of concern, and proper mechanisms for monitoring and reporting;
- Whenever it is reasonably possible, through risk assessment and site selection, Basin Electric will minimize effects to avian and bat species in regard to placement of facilities and supporting infrastructure;
- Design structures to minimize negative impacts to the extent reasonably possible;
- Use best management practices during site construction and maintenance;
- After construction and commissioning, Basin Electric will follow developed monitoring and reporting procedures for mortalities and species of interest as necessary;
- During maintenance activities, Basin Electric will follow developed best management practices;
- As necessary, Basin Electric will consult with local, state and federal experts to gain guidance and share information;
- Whenever reasonable and possible, Basin Electric will take measures to reduce mortality to avian and bat species;
- Basin Electric will implement quality control measures to ensure compliance with the ABPP and identify any necessary updates and/or revisions to the ABPP;

- When retrofitting existing structures, Basin Electric will follow the same standards as new construction whenever practicable.

3.0 Permit Compliance

Basin Electric has developed the following process to obtain and comply with all necessary permits and laws pertaining to avian and bat issues. This process may continue past commissioning and through the life of a project, facility or infrastructure. The Basin Electric person assigned to a project or facility as the environmental lead is responsible for obtaining and ensuring compliance with all permits. Basin Electric has membership in nine states, and therefore, may be subject to a variety of permits, laws and agencies, depending upon location.

Permit Process

1. During the project initiation stage, an individual or team from Environmental Services of Basin Electric should be assigned to the project.
2. During the project development stage, the Environmental Services personnel assigned to the project must develop a working list of permits that may potentially be required for the project. This list may continue to develop as the project develops.
3. Environmental staff has lead responsibility for permitting. Environmental staff will work with Basin Electric engineering, drafting, GIS, right-of-way, other Basin Electric staff, and consultants to prepare permit applications.
4. When permits have been received, the environmental staff will submit the permits to the Records division and notify the project manager of the permit.
5. If the permit contains provisions regarding construction, monitoring and/or reporting, environmental personnel must inform appropriate individuals.

4.0 Training

As needed, training on avian and bat issues will be provided for Basin Electric staff as well as contracted staff. This training may vary based on type of project, length of project, project stage, time of year and potentially affected species. An individual's role may dictate the training that may be provided for project development, construction and/or operations. Depending upon the project, training may occur during project development, construction and/or operation. It is not anticipated that all projects will require training at all or any level. Additionally, some projects, such as wind farms, may require project or site specific training to be developed.

5.0 Site Selection and Site Design

Site selection applies the analysis gained from the risk assessment when selecting a project site. In addition, site selection involves Basin Electric meeting with applicable agencies and landowners. Basin Electric is committed to contacting applicable state and federal agencies early in the project development process. These contacts help ensure that avian, bat and other environmental issues are illuminated as soon as possible.

Wind Turbine Site Layout and Design

Basin Electric typically sites wind projects as close to existing transmission lines as possible to minimize the construction to new transmission lines. All collector lines and communication cables are buried to avoid habitat loss and prevent collisions. Typically, this infrastructure would be adjacent to the access roads or along public rights-of-way or easements when possible.

Wind Turbine Siting Parameters

Generally, in addition to high quality wind resource and available transmission, Basin Electric looks to site wind turbines in areas of high pre-existing disturbances when possible. In areas that are going to be monitored closer for wind potential, simultaneously, these areas may also be examined closer for potential avian and bat concerns. A Potential Impact Index (PII) may be done on any site being considered for possible development.

Often, the wind farm layout goes through a series of iterations. Each turbine is microsituated in relation to wind potential, wildlife, permitting, and other environmental and cultural constraints. Specifically, the following guidelines may be used when siting each wind turbine:

- Distance from section line or road;
- Distance from occupied residence;
- Out of hydric soils of a wetland;
- Near edges of a grassland;
- Avoid land with encumbrances, easements or other restrictions;
- Distance from a missile site or military installations;
- Distance from another turbine in the predominant wind direction;
- Distance from a transmission line; and
- Potential impacts on human, cultural, environmental, and natural resources and populations.

Transmission Line Siting Parameters

A preferred transmission line route is chosen from a number of alternatives. The preferred route would be selected after assessing each alternative based on a series of project-specific criteria. The following specific guidelines may be used when siting transmission lines:

- Length of the transmission line;
- Right-of-way requirements and availability;
- Land use considerations such as visual impacts, proximity to residences, and impact on agricultural activities as well as existing and future land use;

- Environmental resource considerations such as impacts on cultural or biological resources such as wildlife, plants, and wetlands;
- Jurisdiction and regulatory considerations;
- Conflicts with airport height restrictions;
- Cost; and
- Requirements of Federal and state law.

The technical performance of each transmission line alternative must be checked with a system analysis to ensure the project meets National Electric Reliability Council standards. Often the termination points of a transmission line are dictated by a need to reinforce a certain area of the transmission system or to provide access for a new generation or load. Usually there is flexibility in the routes of a transmission alternative as long as the line is terminated at the critical sending and receiving locations.

There are a number of factors regarding transmission line placement that may be considered when evaluating the potential impact the transmission line may have to avian species. Among these factors are proximity, vegetation and topography. Engineering and economic concerns must also be considered.

Proximity refers to the distance of the transmission line to any area of prime habitat or potential stopover habitat such as shallow wetlands. The closer the transmission line is to the habitat, the greater the chance for potential collisions.

In instances where the transmission line may be near areas where birds concentrate (e.g., wetlands, stream crossings, historic staging areas, roosts and nesting colonies) Basin Electric will assess if bird diversion devices should be utilized. These devices enhance line visibility, and therefore can reduce the risk of collision.

6.0 Construction Design Standards and Development Practices

General Construction Standards

Basin Electric will use best management practices during construction to minimize impacts to avian and bat species and their habitats. Pre-construction surveys may or may not be conducted depending upon the project. Examples of potential pre-construction surveys are breeding bird surveys, raptor breeding surveys, habitat of concern surveys and lek identification surveys. If pre-construction surveys are conducted, appropriate actions will be taken during construction as a result of the survey(s).

Wetlands will be avoided to the extent practicable during the construction phase of any wind project. If impacts to United States Army Corp of Engineers (USACE) jurisdictional waters are unavoidable, then Basin Electric will seek coverage under a Section 404 USACE Nationwide Wetland Permit. Permanent impacts to jurisdictional waters will be mitigated according to USACE requirements.

Wind Farm Construction

The building of new roads for wind farm construction and maintenance will be minimized. The existing road system will be used to the extent possible. When additional access roads are necessary, they will generally be built on ridges away from wetlands. When possible, new roads will follow the route of underground collector lines to minimize surface disturbance, and minimizing the disturbance of natural prairie and habitat. Additional road width necessary for construction would be reclaimed after construction.

Typically, temporary meteorological towers associated with a wind farm will be removed when construction begins any permanent meteorological tower will be freestanding and have no guy wires except for unusual circumstances when no other operations are practicable. Basin Electric continues to monitor new technology advancements in the market to find additional, less intrusive ways to monitor meteorological conditions.

Training for construction personnel will be site specific. Any observation of threatened or endangered avian and bat species will be reported to state and Federal agencies according to site-specific protocol. In the event of a sighting, construction activities, including curtailing would proceed according to site-specific protocol. Additionally, trained biologists may be on site during construction. This will be determined on a project by project basis.

Basin Electric will use best management practices during construction and operation of any wind farm to protect topsoil and adjacent wetland resources and to minimize soil erosion. Practices may include containing excavated material, use of silt fences, protecting exposed soil, stabilizing restored material, and revegetating disturbed areas with native species to preserve habitat.

Transmission Line Construction

Basin Electric uses *Mitigating Bird Collisions with Power Lines* (APLIC 1994) and *Reducing Avian Collisions with Power Lines: The State of the Art in 2012* (APLIC 2012), or the most current versions of these documents as guidance. In general, in areas where electrocution may

be a concern, a minimum of 150 cm (60 in) will be provided between phase conductors. Basin Electric builds and maintains transmission lines. These transmission lines are constructed such that electrocution is typically not a concern. In some situations, perch deterrents may be necessary to discourage birds from landing on areas where avian safety is a concern. A combination of the above options may be necessary to protect avian species to the extent possible.

7.0 Post-construction Monitoring and Reporting and Management

Active monitoring and/or use surveys for wind farms and transmission lines are not considered routine operation. Rather, incidental finds or finds resulting from maintenance activities would typically be documented and/or reported. All monitoring protocols, if necessary, will be developed on a site-specific basis. Depending upon the site or project, monitoring efforts may be very limited. If monitoring is appropriate, fatality monitoring and/or avian use surveys may be done.

Basin Electric considers incidental finds and reporting of avian and bat injuries or mortalities on the project site a basic job duty of all on-site personnel. All on-site personnel will be trained in appropriate procedures for identifying and reporting avian or bat injuries or mortalities.

Upon discovery of an injured or deceased avian or bat species on the project site, the following procedure will be followed by on-site personnel.

8.1 Wind Farm Operational Monitoring and Reporting

1. Do not remove, touch or move the bird or bat.
2. Photograph the bird or bat and complete the appropriate form.
3. If the bird or bat is a threatened or endangered species or otherwise a species of interest, such as a raptor, immediately notify the Distributed Generation Manager and Environmental Services of Basin Electric. Contact information for Environmental Services is provided on the form in Appendix C.
4. Environmental Services will work with trained biologists for proper handling of the bird or bat and notification of appropriate state and Federal agencies.
5. All completed forms, associated pictures, and any additional documentation will be forwarded to Environmental Services at Basin Electric headquarters in a timely manner.

8.2 Transmission Line Monitoring and Reporting

1. Do not remove, touch or move the bird or bat.
2. Photograph the bird or bat and complete the appropriate form.
3. If the bird or bat is a threatened or endangered species or otherwise a species of interest, such as a raptor, immediately notify the Transmission Line Superintendent and Environmental Services of Basin Electric. Contact information for Environmental Services is provided on the form in Appendix A.
4. Environmental Services will work with trained biologists for proper handling of the bird or bat and notification of appropriate state and Federal agencies.
5. All completed forms, associated pictures, and any additional documentation will be forwarded to Environmental Services at Basin Electric headquarters in a timely manner.

Nest Management

Raptors and other avian species may use transmission line poles as a nesting site. The risk of avian electrocution with these nests is not high, but the nests may cause operation and maintenance issues. The Migratory Bird Treaty Act protects all active nests. A nest is considered active if it has eggs or young birds. If an active nest has the potential to interfere with transmission line operations, the USFWS and the state game and fish department must be conferred with. The Migratory Bird Treaty Act prohibits the collecting of any active nest belonging to a migratory bird. Facility operators will at no time move or destroy any nest without receiving approval from Environmental Services of Basin Electric. Contact information for Environmental Services is provided on the form in Appendix B. Environmental Services will use environmental consultants, the USFWS, and the state game and fish department to determine the best course of action in each situation. Nests of eagles and threatened and endangered species may not be moved or destroyed at any time without consultation with the USFWS and the state game and fish department.

Avian species tend to nest in site specific locations. Therefore, moving a nest does not mean that the nest will not be re-built in the same location. As a result, nesting platforms may be utilized. If nesting platforms are to be used, they should be installed on or near the transmission tower that had been utilized for the avian nesting. A nearby, non-energized pole is preferred. The nesting platform should be installed in a way such that nesting materials and avian excrement will not contaminate the lines. If a platform is used, plastic poles, corrugated pipe, or other materials may be placed on the transmission structure to discourage the building of nests particularly in situations where nest building in general should be discouraged for the protection of people, the nesting birds, and/or the power system.

8.0 Consultation and Information Sharing

Basin Electric understands that a great deal of information regarding wildlife interactions with wind turbines, transmission lines and other structures may potentially be gained through the use of routine data collection and surveys. This information, in addition to information gained from other utilities, may result in better practices and new technology that provides more protection to wildlife, particularly avian and bat species. In efforts to facilitate this information gathering, Basin Electric will consider all requests for non-proprietary data and information.

Additionally, Basin Electric looks to the USFWS and state game and fish departments to provide consultation services and expert advice throughout the life of projects.

9.0 Mortality Reduction Measures

The information gained through risk management activities, along with additional data collection, will be analyzed by Basin Electric Environmental Services staff and/or wildlife consultants. This analysis will then be translated for future project development as best practices to prevent avian and bat mortality and injury. This information will also be used by Basin Electric to determine whether or not a mortality reduction plan for the project or site is warranted. The data collected through the implementation of the ABPP will also help determine the need for a mortality reduction plan.

If a mortality reduction plan is needed there are a number of elements that may be included. A risk assessment may provide information predicting the best approach. Biological and electrical design information should also be utilized to prioritize transmission poles, identify benefits and causes of injury or mortality to avian species and bats.

10.0 Avian and Bat Enhancement Options

Basin Electric has for many years provided excellent avian habitat through the use of reclaimed mine land, and other mitigation and reclamation projects and opportunities Basin Electric has also sought out opportunities to partner in habitat conservation with non-governmental organizations. In addition, Basin Electric welcomes collaboration between Basin Electric and volunteer groups and service organizations to enhance avian and bat populations.

11.0 Quality Control

Quality control and review is vital to ensuring that the ABPP accomplishes the goals set forth and remains a useful tool in avian and bat protection. Training will be conducted annually for facility maintenance staff. Every two years, or more frequently if needed, the ABPP will be reviewed and updated by Basin Electric environmental and project staff, and/or consultants.

12.0 Key Resources

The following have been identified as key resources for the ABPP, particularly within Basin Electric's Service area.

U.S. Fish and Wildlife Service Migratory Bird Permit Regional Offices

Region 3: (Iowa, Illinois, Indiana, Minnesota, Missouri, Michigan, Ohio, Wisconsin)

U.S. Fish and Wildlife Service Migratory Bird Permit Office

One Federal Drive

Fort Snelling, MN 55111

Telephone (612) 713-5436

Fax: (612) 713-5393

Email: permitsR3MB@fws.gov

Region 6: (Colorado, Kansas, Montana, North Dakota, Nebraska, South Dakota, Utah, Wyoming)

U.S. Fish and Wildlife Service Migratory Bird Permit Office

P.O. Box 25486 DFC (60154)

Denver, CO 80225-0486

Telephone: (303) 236-8171

Fax: (303) 236-8017

Email: permitsR6MB@fws.gov

U.S. Fish and Wildlife Service Office of Law Enforcement

National Headquarters

Office of Law Enforcement

U.S. Fish and Wildlife Service

4401 North Fairfax Drive,

MS-LE-3000

Arlington, Virginia, USA 22203

Telephone: (703) 358-1949

Fax: (703) 258-2271

Great Lakes – Big Rivers Region (3): Illinois, Indiana, Iowa, Michigan, Minnesota, Missouri, Ohio, Wisconsin

U.S. Fish and Wildlife Service

Office of Law Enforcement

One Federal Drive

Fort Snelling, Minnesota, USA 55111-0045

Telephone (612) 713-5320

Fax: (612) 713-5283

Mountain-Prairie Region (6): Colorado, Kansas, Montana, Nebraska, North Dakota, South Dakota, Utah, Wyoming

U.S. Fish and Wildlife Service

Office of Law Enforcement

P.O. Box 25486 - DFC

Denver, Colorado USA 80225

Telephone: (303) 236-7540
Fax: (303) 236-7901

U.S. Fish and Wildlife Service Ecological Services Field Offices

U.S. Fish and Wildlife Service
Montana Ecological Services Field Office
585 Shepard Way
Helena, MT 59601
Telephone: (406) 449-5225
Fax: (406) 449-5339
Email: MontanaFieldOffice@fws.gov
<http://www.fws.gov/montanafieldoffice>

U.S. Fish and Wildlife Service
Nebraska Ecological Services Field Office
203 West Second Street
Federal Building, Second Floor
Grand Island, NE 68801-5907
Telephone: (308) 382-6468
Fax: (308) 384-8835
Email: June_Deweese@fws.gov
<http://www.fws.gov/mountain-prairie/es/Nebraska/index.htm>

U.S. Fish and Wildlife Service
North Dakota Ecological Services Field Office
3425 Miriam Avenue
Bismarck, ND 58501-7926
Telephone: (701) 250-4481
Fax: (701) 355-8513
Email: northdakotafieldoffice@fws.gov
<http://www.fws.gov/northdakotafieldoffice>

U.S. Fish and Wildlife Service
South Dakota Ecological Services Field Office
420 S. Garfield Avenue, Suite 400
Pierre, SD 57501-5408
Telephone: (605) 224-8693
Fax: (605) 224-9974
Email: southdakotafieldoffice@fws.gov
<http://www.fws.gov/southdakotafieldoffice>

U.S. Fish and Wildlife Service
Wyoming Ecological Services Field Office
5353 Yellowstone Road, Suite 308A
Cheyenne, WY 82009
Telephone: (307) 772-2374
Fax: (307) 772-2358
<http://www.fws.gov/wyominges>

U.S. Fish and Wildlife Service National Eagle Repository

U.S. Fish and Wildlife Service
National Eagle Repository
Rocky Mountain Arsenal, Building 619
Commerce City, CO 80022
Telephone: (303) 287-2110
Fax: (303) 287-1570
<http://mountain-prairie.fws.gov/law/eagle>

Code of Federal Regulations (CFR) websites

Main CFR webpage

<http://gpoaccess.gov/cfr/>

List of migratory birds, 50CFR10.13

http://a257.g.akamaitech.net/7/257/2422/01dec20031500/edocket.access.gpo.gov/cfr_2003/oct_qtr/50cfr10.13.htm

General permit procedures, 50CFR13

http://access.gpo.gov/nara/cfr/waisidx_03/50cfr13_03.html

Endangered and threatened wildlife and plants, 50CFR17

http://access.gpo.gov/nara/cfr/waisidx_03/50cfrv2_03.html

Migratory bird permits, 50CFR21

http://access.gpo.gov/nara/cfr/waisidx_03/50cfr21_03.html

Eagle permits, 50CFR22

http://access.gpo.gov/nara/cfr/waisidx_03/50cfr22_03.html

State Agencies

Iowa Department of Natural Resources

502 E. 9th Street

Des Moines, IA 50319-0034

Telephone: (515) 281-5918

Fax: (515) 281-8895

Email: webmaster@dnr.iowa.gov

<http://www.iowadnr.gov/>

Minnesota Department of Natural Resources

500 Lafayette Road

St. Paul, MN 55155-4040

Telephone: (651) 296-6157

Email: info@dnr.state.mn.us

<http://www.dnr.state.mn.us>

Montana Department of Fish, Wildlife and Parks

1420 East Sixth Avenue

P.O. Box 200701

Helena, MT 59620-0701
Telephone: (406) 444-2535
Fax: (406) 444-4952
E-mail: fwpgen@mt.gov
<http://fwp.mt.gov/default.html>

Nebraska Game and Parks Commission
2200 N 33rd Street
Lincoln, NE 68503
Telephone: (402) 471-0641
Email: ngpc.webmaster@nebraska.gov
<http://www.ngpc.state.ne.us>

North Dakota Game and Fish Department
100 N Bismarck Expressway
Bismarck, ND 58501-5095
Telephone: (701) 328-6300
Fax: (701) 328-6352
Email: ndgf@nd.gov
<http://gf.nd.gov/>

South Dakota Department of Game, Fish and Parks
523 East Capitol Avenue
Pierre, SD 57501
Telephone: (605) 773-3485
Email: Wildinfo@state.sd.us
<http://www.sdqfp.info/Index.htm>

Wyoming Game and Fish Department
5400 Bishop Boulevard
Cheyenne, WY 82006
Telephone: (307) 777-4600
<http://gf.state.wy.us/>

Consultants

Corporate Headquarters
Western EcoSystems Technology, Inc. (WEST)

2003 Central Avenue
Cheyenne, Wyoming 82001
Phone: (307) 634-1756
Fax: (307) 637-6981
Email: admin@west-inc.com
<http://www.west-inc.com/index.php>

Midwest-West Region
Western EcoSystems Technology, Inc. (WEST)
Bismarck Branch Office
4007 State Street, Suite 109

Bismarck, North Dakota 58503
Phone: (701) 250-1756

13.0 Appendices

13.1 *Appendix A – Dead or Injured Bird Form – Transmission Line*

13.2 *Appendix B – Nest Form – Transmission Line*

13.3 *Appendix C – Dead or Injured Bird or Bat Form – Wind Farm*

Dead or Injured Bird Form – Transmission Line (Adapted from APLIC 2006)

Date of Form Completion: _____

BIRD INFORMATION

Dead or Injured Bird (circle one)

Raptor; Specify: _____

Hawk / Falcon / Osprey

Small bird; Specify: _____

Bald Eagle

Golden Eagle

Owl; Specify: _____

Waterfowl; Specify: _____

Unknown Species

Other: _____

If unable to identify, please describe:

Bird Count: _____

Physical Condition of Bird or Bat: (Body intact, just feathers, type of injury, etc).

If any bands or tags, please notify Environmental Services and write the tag/band number and agency _____

Date Found: _____ Time Found: _____

Sign of Death or Injury (circle one) Collision Electrocution Shot Roadkill
Unknown Other: _____

Sign of electrocution: Burnt feathers Burnt talons Burnt bill Exit Wound
Other _____

If known, describe how the bird was injured or died (bird contacted transformer bushings, etc.)

Weather conditions at time of death if known (e.g. rainy and cold, sunny and warm, etc)

Circle all that were present: Pellets Whitewash Prey remains

Status of carcass/remains: No carcass Left on-site

LOCATION INFORMATION

County and State: _____

Finder's Last Name: _____ First Name: _____

Operations Area: _____

Line Name/Circuit No. _____ Structure Identification No. _____

Description of Terrain and Vegetation in Area (e.g. near agriculture area, near wetlands, rugged terrain, native prairie, dense city area, residential housing, etc.)

Structure Configuration: (Circle one. If the configuration is not listed, please describe.)

- a) Lattice
- b) Monopole
- c) H-frame

Comments: _____

Is a nest visible nearby? If so, please provide detailed description of the size and location of the nest. _____

If there is a nest nearby, is it active or inactive? _____

FOLLOW UP ACTIONS

Recommended Action (circle one)

Install nesting platform

Reframe structure

Install bird flight diverters/fireflies

Continue to monitor line (Justification required)

No action (Justification required)

COMMENTS/ADDITIONAL INFORMATION: _____

Form received by Environmental Services _____	Date _____
Notification to USFWS _____	Date _____
Notification to State Game and Fish _____	Date _____
Corrective Action _____	Date _____

Environmental Services Contacts

- 1. Erin Fox Dukart – Office: (701) 557-5557; Cell: (701) 202-5143
- 2. Kevin Solie – Office (701) 557-5495; Cell: (701) 202-5096
- 3. Lyle Witham – Office (701) 557-5652; Cell: (701) 202-5473

Nest Form – Transmission Line (Adapted from APLIC 2006)

Date of Form Completion: _____

NEST INFORMATION

Nesting Bird (circle one)

Crow / Magpie / Raven

Hawk / Falcon / Osprey

Bald Eagle

Golden Eagle

Small bird; Specify: _____

Owl; Specify: _____

Waterfowl; Specify: _____

Unknown Species

Other: _____

If unable to identify, please describe:

Nest: (circle one) Active Inactive

Date Found: _____

Condition of the nest: _____

Are eggs or young birds apparent? If so, please describe. _____

LOCATION INFORMATION

Operations Area: _____

Line Name/Circuit No. _____ Structure Identification No. _____

County and State: _____

Finder's Last Name: _____ First Name: _____

Description of Terrain and Vegetation in Area (e.g. near agriculture area, near wetlands, rugged terrain, native prairie, dense city area, residential housing, etc.)

History of previous nesting on this circuit? If so, please describe. _____

History of electrocutions/mortality on this circuit? If so, please describe. _____

FOLLOW UP ACTIONS

Recommended Action (circle one)

Install nest platform

Relocate nest

Trim nest

Install nest discouragers

Remove nest

Evaluate to determine appropriate action

No action

Comments/Additional Information:

Form received by Environmental Services _____ Date _____

Notification to USFWS _____ Date _____

Notification to State Game and Fish _____ Date _____

Corrective Action _____ Date _____

Environmental Services Contacts

1. Erin Fox Dukart – Office: (701) 557-5557; Cell: (701) 202-5143
2. Kevin Solie – Office (701) 557-5495; Cell: (701) 202-5096
3. Lyle Witham – Office (701) 557-5652; Cell: (701) 202-5473

Dead or Injured Bird or Bat Form – Wind Farm (Adapted from APLIC 2006)

Date of Form Completion: _____ Name of Wind Farm: _____

AVIAN/BAT INFORMATION

Avian Species (circle one)

Raptor; Specify: _____

Hawk / Falcon / Osprey

Small bird; Specify: _____

Bald Eagle

Golden Eagle

Owl; Specify: _____

Waterfowl; Specify: _____

Unknown Species

Other: _____

If unable to identify, please describe:

Bat Species (circle one)

Big Brown Bat

Eastern Red Bat

Fringed Myotis

Hoary Bat

Little Brown Bat

Long-eared Myotis

Long-legged Myotis

Northern Myotis

Silver-haired Bat

Townsend's Big-eared Bat

Western Small-footed Myotis

Unknown species

Other: _____

If unable to identify, please describe:

Bird or Bat Count: _____ Did avian/bat die: Yes No

If any bands or tags, please notify Environmental Services and write the tag/band

number and agency _____

Physical Condition of Bird or Bat: (Body intact, just feathers, type of injury, etc).

Sign of Death or Injury (circle one) Collision Electrocution Shot Roadkill
Unknown Other: _____

Date Found: _____ Time Found: _____

If known, describe how the bird or bat was injured or died (bird contacted transformer bushings, turbine collision, etc.) _____

Weather conditions at time of death if known (e.g. rainy and cold, sunny and warm, etc)

Status of carcass/remains: No carcass Left on-site

LOCATION INFORMATION

Closest Turbine Identification No. _____

County and State: _____

Finder's Last Name: _____ First Name: _____

Location Description (Include nearest structure, distance from structure, etc.)

Description of Terrain and Vegetation in Area (e.g. near agriculture area, near wetlands, rugged terrain, native prairie, dense city area, residential housing, etc.)

Nest visible nearby? If so, please provide detailed description of the size and location of the nest. _____

Comments/Additional Information:

Form received by Environmental Services _____	Date _____
Notification to USFWS _____	Date _____
Notification to State Game and Fish _____	Date _____
Corrective Action _____	Date _____

Environmental Services Contacts

1. Erin Fox Dukart – Office: (701) 557-5557; Cell: (701) 202-5143
2. Kevin Solie – Office (701) 557-5495; Cell: (701) 202-5096
3. Lyle Witham – Office (701) 557-5652; Cell: (701) 202-5473