

Skyline to Warren- Black Hills Energy Electric Line Draft Environmental Assessment (EA)

F. E. Warren Air Force Base, Wyoming



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1 PURPOSE AND NEED FOR THE PROPOSED ACTION

1.1 Introduction

Black Hills Energy (BHE) is proposing to install eleven (11) new electric pole structures on an existing electric line that is located between the Warren Substation and Skyline Substation in Cheyenne, WY. All 11 poles that will be added will be on F. E. Warren Air Force Base (FEW). FEW is headquarters to the 90th Missile Wing, the Air Force Global Strike Command unit that operates FEW and its associated missile field. The 90th Missile Wing is responsible for missile alert facilities and launch facilities supporting Minuteman III missiles. Missiles are deployed in an area encompassing 12,600 square miles in the states of Colorado, Nebraska, and Wyoming.

An Environmental Assessment (EA) will be prepared to evaluate the potential environmental impacts of the proposed action to install the 11 new structures in compliance with the National Environmental Policy Act of 1969 (NEPA) (42 United States Code [USC] 4331 et seq.), regulations issued by the Council on Environmental Quality (CEQ) published in 40 Code of federal Regulations (CFR) Parts 1500-1508.

1.1.1 Location

FEW occupies 5,866 acres of federally owned land on the western edge of the city of Cheyenne in southeastern Wyoming.



Figure 1: Black Hills Energy currently operates and maintains and electric line between the Warren Substation and Skyline substation. The area outlined in red above is the proposed area for 11 new structures.

1.2 Purpose and Need

The existing electric line on FEW serves energy to the base and to customers in the City of Cheyenne. In recent years there have been power outages due to wind and ice loading on the line causing galloping lines. Adding new structures will provide better support to the line and reduce the number of outages for all customers in Cheyenne. Adding new structures is a typical best management practice and maintenance activity for existing power lines.

1.3 Scope of the Assessment

This EA will be developed in accordance with National Environmental Policy Act (NEPA), 42 U.S. Code 4321 et seq, implementing Council on Environmental Quality (CEQ) Regulations, 40 Code of Federal Regulations (CFR) 1500-1508, and 32 CFR Part 989, Environmental Impact Analysis Process. This EA facilitates the planning and decision-making by the 90th Missile Wing Commander (90 MW/CC). It helps the Air Force, stakeholders, and the public understand the potential extent of environmental impacts of the proposed action and alternatives, and whether the impacts (direct, indirect, and cumulative) are significant.

The EA will include a no action alternative. The proposed action was selected because it fully meets the purpose and need. The EA will discuss the affected environment and environmental consequences of the proposed action. This EA will include an analysis of the potential impacts the proposed action may have on land use, air quality, noise, geology, soils, water resources, biological resources, cultural resources, socioeconomics, transportation and traffic, airspace, and hazardous and toxic materials/wastes.

1.4 Public and Agency Involvement

NEPA requires that environmental information be made available to the public throughout the decision-making process and prior to actions being taken. Agency and public comments and concerns are taken into consideration in the decision-making process and development of the EA. Interagency coordination, and public outreach and input will be completed in accordance with relevant regulations, guidance, and policies. A Notice of Availability (NOA) will be announced in local media for public review and comment. The EA will be made available to the public for 30 days along with a draft Finding of No Significant Impact (FONSI) which is conditional upon the results of the EA.

Federal, state, and local agencies with jurisdiction could be affected by the proposed action. Consultation with the U.S. Fish and Wildlife Service (USFWS) will be sought in accordance with Section 7 and/or Section 10 of the Endangered Species Act, as applicable. The Wyoming State Historic Preservation Office was consulted in accordance with Section 106 (54 U.S.C. 306108) of the National Historic Preservation Act to determine if the proposed action would impact cultural resources.. In addition, the U.S. Army Corp of Engineers (USACE) will be consulted for impacts to jurisdictional waters of the U.S. as defined and protected under the Clean Water Act (CWA).

1.5 Decision Making

The EA will evaluate whether the proposed action would result in significant impacts to the environment. FEW will consider all relevant environmental information and stakeholder and public issues of concern raised as part of the NEPA process. If the process results in a FONSI, the 90 MW/CC will document his or her decision on which alternative to implement, which would be signed no earlier than 30 days from the publication of the NOA of the Final EA/Draft FONSI. Upon a determination that there are no significant impacts, FEW would sign the FONSI and carry out the decision. If significant impacts are identified, FEW would undertake mitigation to reduce impacts to below the level of significance, undertake the preparation of an Environmental Impact Study, or abandon the proposed action.

2 DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES

2.1 Proposed Action

The proposed action is the installation of 11 new electric pole structures on an existing electric line. Since the line is regularly accessed for line maintenance, an access path is already designated and no additional disturbance will be created for access. The total disturbance will be approximately a 10'x10' area for to install each new pole structure, or 1100 square feet total. Construction equipment and staging will be located offsite at an established Black Hills Energy staging yard. Construction would begin in early September 2021 and would be complete by the end of September 2021.

2.2 No Action Alternative

Under the no action alternative, the proposed action would not be implemented. The existing electric line would be maintained and operated at its current level. More frequent maintenance would be expected without the addition of the 11 new structures.

2.3 Alternatives

Instead of adding new structures to this line, Black Hills considered an alternative to remove all the existing structures and relocate the entire line underground with conduit. A project of this magnitude would result in a large trench and spoil piles that would dramatically increase the disturbed area and impact. This type of effort would also need to be reviewed by the Public Utilities Commission (PUC) as part of a Certificate of Public Convenience and Necessity (CPCN). Due to the multimillion-dollar effort that would be passed on to Cheyenne ratepayers and increased unnecessary surface disturbance, it is unlikely that the PUC would approve the project. Since this effort would not be approved, it is not discussed further in this EA.

3 Summary of Environmental Consequences and Proposed Mitigations

3.1 Valued Environmental Components and Focusing of the Analysis

In compliance with the NEPA and CEQ regulations, the description of the affected environment focuses on those resources and conditions potentially subject to effects from implementing the Proposed Action. CEQ regulations encourage NEPA analyses to be as concise and focused as possible. This is in accordance with CEQ regulations at 40 CFR 1500.1(b) and 1500.4(b): "...NEPA documents must concentrate on the issues that are truly significant to the action in question, rather than amassing needless detail.... prepare analytic rather than encyclopedic analyses."

Valued Environmental Components (VECs) are categories of environmental and socio-economic resources for which impact analysis is conducted to enable a managed and systematic analysis of these resources. Table 1 presents each VEC and corresponding regions of influence (ROI) and thresholds of significance. The table also identifies which VECs are analyzed in this EA and which VECs are dismissed from further analysis; each includes an accompanying rationale. In conducting this analysis, a qualified subject matter expert reviewed the potential direct and indirect effects of the No Action Alternative relative to each VEC. The subject matter expert carefully analyzed and considered the existing conditions of each VEC within the Proposed Action's ROI.

Through this analysis, it was determined that, for several VECs and VEC sub-components, negligible adverse effects were predicted without detailed analysis. This included land use, noise, socio-economics, traffic and transportation, and hazardous materials and waste.

Context and intensity are taken into consideration in determining a potential impact's significance, as defined in 40 CFR 1508.27. The context means that the significance of an action must be analyzed in several contexts such as the affected region, the affected interests, and the locality. The intensity of a potential impact refers to the impact's severity and includes consideration of beneficial and adverse impacts, the level of controversy associated with a project's impacts on quality of the human environment, whether the action establishes a precedent for future actions with significant effects, the level of uncertainty about project impacts, and whether the action threatens to violate federal, state, or local law requirements enacted for the protection of the environment. The severity of environmental impacts is characterized as none/negligible, minor, moderate, significant, or beneficial as described:

- **None/Negligible** No measurable impacts are expected to occur. A negligible impact may locally alter the resource, but would not measurably change its function or character.
- **Minor** Primarily short-term but measurable adverse impacts are expected. Impacts on the resource may be slight.

- Moderate but less than significant Noticeable adverse impacts that would have a
 measurable effect on a wide scale (e.g., outside the footprint of disturbance or on a
 landscape level). If moderate impacts were adverse, they would not exceed limits of
 applicable local, state, or federal regulations.
- **Significant** A significant impact may exceed limits of applicable local, state, or federal regulations or would untenably alter the function or character of the resource. These impacts would be considered significant unless managed by mitigation efforts to a less than significant level.
- **Beneficial** Impacts would benefit the resource/issue.

VEC	ROI	Threshold of Significance	Dismissed from Further Analysis?	Rational for Analyzing Further or Not
Air Installation Compatible Use Zone/Land	Land use within FEW	Impacts to land use would be considered significant if the land use were incompatible with existing military land uses and designations (including recreation). These impacts may conflict with land use plans, policies, or regulations, or conflict with land use off-post.	Yes	The Proposed Action consists of the placement of 11 power poles within a utility easement, therefore no land use change is anticipated. Further evaluation is not warranted.
Air Quality	Air Quality Control Region	An impact to air quality would be considered significant if the Proposed Action were to generate emissions which: • Did not meet Clean Air Act conformity determination requirements to conform with the State	Greenhouse Gas: Yes Fugitive Dust: Yes	There would be no measurable increase in greenhouse gas emissions. There may be a minor and temporary increase in dust from construction prior to the completion of reclamation efforts. Further evaluation is not warranted.

Table 1: Need for analysis by VEC

VEC	ROI	Threshold of Significance	Dismissed from Further Analysis?	Rational for Analyzing Further or Not
		 Implementation Plan Substantially increase GHG emissions; or Contribute to a violation of any federal, state, or local air regulation. 		
Water Resources	Watersheds, state- designated stream segments, and groundwater aquifers associated with Army Corps of Engineers jurisdictional "waters of the U.S." and wetland resources	 Impacts to water quality would be significant if: Results in an excess sediment load in FEW waters affecting impaired resources, Results in unpermitted direct effects to waters of the U.S., Substantially affect surface water drainage or stormwater runoff, 	Yes	Activities associated with construction and long term existence of the power line will not result in any changes to topography or jurisdictional Waters of the United States. Further evaluation is not warranted.

VEC	ROI	Threshold of Significance	Dismissed from Further Analysis?	Rational for Analyzing Further or Not
Safety and Occupational	FEW Property	 Substantially affect groundwater quantity or quality, or Do not comply with policies, regulations and permit related to wetland conservation and protection Impacts would be considered significant if 	Yes	Activities associated with the construction and maintenance of additional 11 structures on the
Health		Proposed Action were to cause harm or injury to FEW employees, community, or contractors		existing line will not increase safety concern. No asbestos, radiation, or chemical exposure is expected. Noise from construction will be short-term and minimal. The noise from the construction equipment would be buffered by vegetation, topography and road noise on Interstate 25. In addition, there will no changes in noise contours for the operation of the electric line. Further evaluation of this resource is not warranted.
Hazardous Materials	FEW property	Impacts to hazardous materials and hazardous waste would be considered significant if substantial additional risk to human health or safety would	Yes	The Proposed Action would not generate hazardous wastes or use hazardous materials. The transformers contain minimal quantities of mineral oil, but secondary containment structures would be designed and constructed prior to setting the transformers. The secondary containment capacity would correspond to the oil capacity of the transformer. The likelihood of contamination on Proposed Action site is remote. If

VEC	ROI	Threshold of Significance	Dismissed from Further Analysis?	Rational for Analyzing Further or Not
Biological Resources	Biological resources	be attributed to the Proposed Action. This includes direct human exposure, Impacts to biological resources would be	Yes	any contamination is encountered, appropriate measures would be taken to remediate the site. Further evaluation of this resource is not warranted. Black Hills' Senior Environmental Professional ran an Information for Planning and Consultation (IPaC) from
	within the cantonment, range and maneuver training areas	 considered significant if: Substantial permanent conversion or net loss of habitat at the landscape scale, Long-term loss of impairment of a substantial portion of local habitat, Loss of population of a species, Unpermitted or unlawful "take" of Endangered Species Act protected species, or species 		USFWS to identify potential threatened and endangered species in the project area on June 28, 2021. The IPaC identified potential habitat for Preble's Meadow Jumping Mouse, Piping Plover, Whooping Crane, Pallid Sturgeon, and the Western Fringed Prairie Orchid. Since construction will take place in the fall, impacts to migratory birds are not expected. Construction will not impact any Waters of the United States or typical habitat for the sturgeon or Preble's mouse. Black Hills reached out to USFWS on June 28, 2021 and received a letter on July 1 st that confirmed that they have not identified any issues relative to species or critical habitat listed under the Endangered Species Act.

VEC	ROI	Threshold of Significance	Dismissed from Further Analysis?	Rational for Analyzing Further or Not
Cultural	Cultural	protected under the Bald and Golden Eagle Protection Act or the Migratory Bird Treaty Act Impacts to	Yes	Correspondence with the State Historical
Resources	resources within the cantonment, range and maneuver training areas	 Impacts to cultural resources would be considered significant if they cause direct or indirect alteration of the characteristics that qualify a property for inclusion in the National Register of Historic Places (NRHP). These may include physical destruction, damage, alteration, removal, 		Preservation Office (SHPO) indicates that there are no historic properties that will be impacted by the Proposed Action. Further evaluation is not warranted.

VEC	ROI	Threshold of Significance	Dismissed from Further Analysis?	Rational for Analyzing Further or Not
Geology and Soil Resources	Geology and soil resources within the Air	changes to or character of the setting, neglect causing deterioration, and transfer, lease or sale. The effects are also considered significant if the Section 106 process is not followed. Impacts on geology, topography, and soil resources would be	Yes	The Proposed Action would require removal of vegetation and excavation to install the eleven new above-ground poles. There is potential for soil erosion and sedimentation into drainages, however the
Socio-	Force Base	considered significant if: • Excessive soil losses were to impair vegetation growth Impacts to socio-	Yes	construction will take place on an existing two-track that is used for current power line maintenance. There are no major bodies of water nearby, so vegetation and the relatively flat topography would restrict exorbitant amounts of soil from migrating from the construction site. No additional compaction will take place. The Proposed Action would have a no effect on the
economics	and environmental justice factors within FEW and immediate	economics and environmental justice would be considered significant if:		local economy. The proposal would not create jobs, and would not impact children, minorities, low-income or under-served communities. Further evaluation of this resource is not warranted.

VEC	ROI	Threshold of Significance	Dismissed from Further Analysis?	Rational for Analyzing Further or Not
	surrounding communities	 Substantial changes to the sales volume, income, employment or population of Cheyenne and surrounding area, Disproportionate adverse economic, social, or health impacts on minority or low- income populations, or Substantially disproportionate health or safety risk to children. 		
Traffic and Transportation	Pubic roadways and key access points within and near FEW and roadways within the	Impacts to traffic and transportation would be considered significant if the activities: • Substantially degrade traffic	Yes	The Proposed Action would not impact traffic patterns on FEW or within the surrounding communities. The minimal number of vehicles, equipment, and construction traffic associated with the Proposed Action will be coordinated as to not interfere with FEW activities and the surrounding communities. The effects on traffic would be negligible and short-term. Further evaluation of this resource is not warranted.

VEC	ROI	Threshold of Significance	Dismissed from Further Analysis?	Rational for Analyzing Further or Not
	Installation boundary	flow during peak hours, or • Substantially exceed road capacity and design		
Airspace	Airspace above and surrounding FEW	An impact to airspace would be considered significant if the Proposed Action violated federal Aviation Administration safety regulations or causes a substantial infringement of private or commercial flights	Yes	There would be no change to the airspace as a result of the Proposed Action presuming the proper placement of poles. Further evaluation is not warranted.
Facilities, Energy Demand and Generation, and Utilities	Facilities within FEW. Utilities within FEW and in the immediate surrounding communities and counties	Impacts to facilities, energy demand and generation, and utilities would be considered significant if the Proposed Action were to cause an impairment of the utility service to FEW, local communities, homes or businesses.	Yes	Negligible impacts to facilities, energy demand and generation, and utilities are anticipated by the Proposed Action itself; however, the Proposed Action provide more reliability and fewer outages. Further evaluation is not warranted.

3.2 Cumulative Effects

Cumulative effects are impacts of the Proposed Action combined with effects of past, present or reasonably foreseeable actions. The projects in Table 2 have been or would be addressed in separate NEPA documents and are included here to provide a complete picture of cumulative effects of the project. The cumulative effects analysis sections in Section 4 are based on the combination of the effects of the implementation of the eleven new structures, and on those other actions proposed or identified as past, present, or reasonably foreseeable at FEW.

Future Project or Activity at FEW
Ground Based Strategic Deterrence (GBSD)
I-25 Sewer Line Replacement
Potable Water Line Installation
On-Going Project or Activity at FEW
Integrated Resource Management Plan 2020

Table 2: Projects Considered for Cumulative Effects Analysis

3.3 Current and Ongoing Environmental Programs and Plans

FEW is committed to sustaining and preserving the environment. In keeping with that commitment, FEW has an active environmental management program that employs a full array of best management practices (BMPs) and environmental programs to ensure environmental compliance, stewardship, and sustainability of those areas potentially impacted by the upgraded power line. FEW would continue to implement all existing mitigation measures, BMPs, and environmental programs to minimize the impacts of stationing and training. There are several current and ongoing environmental programs and plans that work to mitigate the effects of managing the built environment and training.

The FEW Natural Resource Management Plan, as updated and reapproved in 2020 (INRMP), guides the implementation of a natural resources program at FEW to ensure that the FEW complies with applicable environmental laws and regulations. The INRMP outlines the long-term plan for FEW to manage natural resources in compliance with relevant statutes, executive orders, Presidential memoranda, regulations and Air Force-specific requirements.

The FEW Integrated Cultural Resource Management Plan (2020; ICRMP) provides a framework to integrate the legal requirements for cultural resources management into FEW AFB's military mission and supporting activities. The main purpose of an ICRMP is to establish cultural resources goals, objectives, and policies that FEWwill use to identify and manage its cultural resources. The ICRMP also guides the 90 MW/CC, the Cultural Resources Manager, and other key personnel in carrying out their responsibilities and in their planning and decision-making regarding the management of cultural resources. The ICRMP serves as the planning and guidance document that will assist FEW in complying with Federal preservation requirements and AF policy directives both inside and outside of the National Historic Landmark District and for properties eligible for listing on the National Register of Historic Places.

4 Affected Environment and Environmental Consequences

4.1 Environmental Consequences Summary

VEC	Direct and Indirect Effects of the Proposed Action	Cumulative Effects of the Proposed Action
Land Use	Negligible	Negligible
Air Quality and		
Greenhouse	Negligible	Negligible
Gases		
Noise	Negligible	Negligible
Biological Resources	Negligible	Negligible
Water	Negligible	Negligible
Resources		
Geology and	Negligible	Negligible
Soil Resources	Negligible	regligible
Soils	Negligible	Negligible
Resources	Negligible	Negligible
Cultural	Negligible	Negligible
Resources	Negligible	regligible
Socio-	Negligible	Negligible
Economics	Negligible	regigible
Traffic and	Negligible	Negligible
Transportation		
Air Space	Negligible	Negligible
Facilities,		
Energy,		
Demand,	Negligible	Negligible
Generation, and		
Utilities		
Hazardous Materials	Negligible	Negligible

Table 3: Summary of Cumulative Effects by VEC

4.2 **Proposed Mitigation Summary**

All activities capable of producing fugitive dust is required to use all available and practical methods that are technologically feasible and economically reasonable in order to minimize such emissions.

Disturbed areas will be reseeded with appropriate seed mixtures following construction to promote stability, minimize erosion, and reestablish productivity.

Pre-disturbance nesting bird surveys shall occur within two weeks of starting any ground disturbance during MBTA nesting season (February 15 through September 15). Surveys shall be conducted following species specific and other appropriate protocols according and will include burrowing owl, mountain plover, raptors, eagles and any other MBTA protected bird species. Coordination with FEW should occur to conduct the surveys. If any bird species is found nesting, the proponent will consult FEW for additional USFWS guidance on buffer protection zone sizes until the young have fledged. If inadvertent active nest(s) are discovered during construction activities, contact FEW immediately to avoid MBTA violation(s).

On the three phase power poles, a vertical clearance of at least 43 inches between uninsulated conductors, ground wires and grounded hardware on poles with 8-foot crossarms will provide the 60-inch required clearance. If this design is not possible, installing visibility enhancement devices can reduce the risk of collision on new or existing lines. These devices include marker balls, bird diverters, or other line visibility devices placed in varying configurations, depending on the line design and location.

Construction within drainages will not be conducted during periods of current or anticipated surface water flow.

During construction of the project, stormwater runoff and erosion would be managed through implementation of a site-specific approved SWPPP to control for runoff and sediment loading through implementation of BMPs. BMPs for sediment and erosion control to protect surface water would be accomplished through a combination of construction techniques, vegetation and revegetation, administrative controls, and structural controls.

If during construction there is an inadvertent discovery of cultural resources, all work will cease and the FEW Cultural Resources Manager notified to evaluate the finds.

5 Acronyms

AFI	Air Force Institute
AOI	Area of Interest
ARPA	Archaeological Resources Protection Act
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CR	Country Road
CWA	Clean Water Act
EA	Environmental Assessment
EPA	Environmental Protection Agency
ESA	Endangered Species Act
EO	Executive Order
FAA	Federal Aviation Administration
FEMA	Federal Emergency Management Agency
FNSI	Finding of No Significant Impact
HUC	Hydrologic Unit Code
GHG	Greenhouse Gas
NEPA	National Environmental Policy Act
MBTA	Migratory Bird Treaty Act
NAGPRA	Native American Graves Protection and Repatriation Act
NHPA	National Historical Preservation Act
NOA	Notice of Availability
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resource Conservation Service
NWP	Nationwide Permit
ROD	Record of Decision
RGP	Regional General Permit
ROI	Region(s) of Influence
SPCCP	Spill Prevention, Control, and Countermeasures Plan
SUA	Special Use Airspace
SWPPP	Stormwater Pollution Prevention Plan
T&E	Threatened and Endangered
UAS	Unmanned Aircraft System
USACE	United States Army Corps of Engineers
USC	United States Code
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
VEC	Valued Environmental Component
WOTUS	Waters of the United States

6 List of Preparers

Name	Organization	Title or Role
Ally Little	Black Hills Energy	Environmental Professional
Kory Knottnerus	Black Hills Energy	Project Manager



January 08, 2021

Nicole Wittig Cultural Resources Manager

300 Vesle Drive, Ste 600 F.E. Warren AFB, WY 82005

re: Additional Structures on Existing Transmission Line, DBPR_WY_2020_1312

Dear Ms. Wittig:

Thank you for consulting with the Wyoming State Historic Preservation Office (SHPO) regarding the above referenced undertaking. We have reviewed the associated report and find the documentation meets the Secretary of the Interior's Standards for Archaeology and Historic Preservation (48 FR 44716-42). We concur with your finding that no historic properties, as defined in 36 CFR § 800.16(l)(1), will be affected by the undertaking as planned.

We recommend that the undertaking proceed in accordance with state and federal laws subject to the following stipulation:

If any cultural materials are discovered during construction, work in the area shall halt immediately, the federal agency must be contacted, and the materials evaluated by an archaeologist or historian meeting the Secretary of the Interior's Professional Qualification Standards (48 FR 22716, Sept. 1983).

This letter should be retained in your files as documentation of a SHPO concurrence with your finding of no historic properties affected. Please refer to SHPO project DBPR_WY_2020_1312 on any future correspondence regarding this undertaking. If you have any questions, please contact me at 307-777-8594.

Sincerely,

Brian Beadles

Mark Gordon | *Governor* Darin J. Westby, P.E. | *Director* Sara Needles | *Administrator*





United States Department of the Interior

FISH AND WILDLIFE SERVICE 334 Parsley Boulevard Cheyenne, Wyoming 82007



In Reply Refer to: 06E13000-2021-CPA-0071

July 1, 2021

Ally Little, Senior Environmental Professional Black Hills Energy 1301 W 24th Street Cheyenne, Wyoming 82001

Dear Ms. Little:

Thank you for your letter of June 28, 2021, and phone and electronic mail correspondence on June 29, regarding the proposed Black Hills Energy Warren to Skyline Electric Line project (Project). This Project includes the installation of 11 additional pole structures to the existing Warren to Skyline electric line located on F.E. Warren Air Force Base in Cheyenne, Wyoming. These additional structures will be placed outside of wetlands and built following the Avian Power Line Interaction Committee's guidelines to minimize potential for electrocution and collision. The existing access road will be used to access the sites for the additional pole structures.

We are writing in response to your inquiry related to species listed under the Endangered Species Act (ESA; 16 U.S.C. 1531 *et seq.*), species of special concern, or migratory birds. We have indicated the response we believe best meets your request using the checkboxes below.

You requested a list of endangered, threatened, proposed, and/or candidate species, and designated or proposed critical habitat that may occur in the area of your Project. In an effort to expedite information sharing, we created an Information, Planning, and Consultation System (IPAC), available on-line at https://ecos.fws.gov/ipac/. IPAC can be used to identify any potential federally listed species or critical habitat in your Project area by using the "Initial Project Scoping" tool. For species identified by IPAC, you should review the recommendations and measures at https://www.fws.gov/mountain-prairie/es/endangered.php.

Based on information from your request, our understanding of the nature of the project, local conditions, and current information on federally listed species:

We have not identified any issues relative to species or critical habitat listed under the ESA.

The ESA does not require the U.S. Fish and Wildlife Service to concur with "no effect" determinations; however, we appreciate receiving the information used to support your conclusion.

INTERIOR REGION 5 MISSOURI BASIN KANSAS, MONTANA*, NEBRASKA, NORTH DAKOTA, SOUTH DAKOTA INTERIOR REGION 7 UPPER COLORADO RIVER BASIN

COLORADO, NEW MEXICO, UTAH, WYOMING

 We concur with your "may affect, not likely to adversely affect" determination for federally listed species and designated critical habitat. Your Project should be re-analyzed if Project plans change, if new information on the distribution of listed or proposed species or critical habitat becomes available, or if new information reveals effects to listed or proposed species or critical habitat not previously considered.
Based on information from your request, we also recommend you:
Review recommendations for the protection of migratory birds
(see https://www.fws.gov/mountain-prairie/migbirds/index.php).
Review Avian Power Line Interaction Committee (APLIC) guidelines to avoid and
minimize electrocutions and collisions (see http://www.aplic.org).
Review your Project relative to guidelines regarding cell towers
(see https://www.fws.gov/birds/management/project-assessment-tools-and-
guidance/guidance-documents/communication-towers.php).
Review your Project relative to responsibilities for wetland protection (see
http://www.fws.gov/wyominges/landscapeConservation.php).
Contact the Wyoming Game and Fish Department for measures to minimize impacts
to greater sage-grouse (see http://www.fws.gov/wyominges/Species/GRSG.php).
Take steps to conserve and protect Species of Greatest Conservation Need (see
https://www.fws.gov/wyominges/species_Concern.php).

We appreciate your efforts to conserve endangered, threatened, and candidate species and migratory birds. If you have any questions regarding this letter or your responsibilities under the ESA or other authorities, please contact Julie Reeves of my office by phone at (307) 757-3717.

Sincerely,

for Tyler A. Abbott Field Supervisor Wyoming Field Office

cc: WGFD, Statewide Habitat Protection Program, Cheyenne, WY (wgfd.hpp@wyo.gov)





Warren to Skyline Electric Project







Warren to Skyline Electric Project











Warren to Skyline Electric Project



Warren to Skyline Electric Project





Improving life with energy




ITEM	BHP CODE		MATERIAL			MANUF.	CAT. NO.	QTY.	
1	0048110	L	INSULATOR, SUSPENSION, 115kV		QSIL	S025060S0000	1		
2	0048100	7	INSU	ILATOR, POST, 115kV		QSIL	P250043S0020	1	
3	00265813	3	ANC	HOR SHACKLE		ANDERSON	AS-50	2	
4	0022001	L	NUT	, SQUARE, 7/8"		HB	N80	2	
5	002078X	8XX SQUARE HEAD BOLT, W/ NUT, 7/8" X REQUIRED LENGTH		HB	B8XX-6	2			
6	0022785	5	SQU	SQUARE LOCKNUT, 7/8"		НВ	MF80	2	
7	00227803	L	WAS	WASHER, 7/8" ROUND		НВ	RW2-80	2	
8	0022442	5	WASHER, 4" CURVE, 4" X 4" X 1/4"		НВ	CW80	2		
9		Y-CLEVIS, EYE		ANDERSON	YC5209	1			
10	.0 CUSHION GRIP ASSEMBLY		HION GRIP ASSEMBLY		PLP	CGS-1097	1		
designed: TRIV	REVISION DATE	APPROVED) BY:	115kV-69kV BRACED POST ASSEMBLY	TRANSN				Ż
DRAWN BY:	RAWN BY: REVISION NO. DATE 636 ACSR 26/7 "GROSBEAK"		T-B	DRAWING PAS, SK		Black H	lills En		



1. Pole top assembly for this framing unit includes the following construction assembly units:

UNIT	DESCRIPTION
	FIBER OPTIC SUSPENSION ASSEMBLY
x	115 kV BRACED POST ASSEMBLY, 795 ACSR TERN

See standard unit drawings for material details.

2. Pole with arms and mounting hardware, foundation, grounding and other materials are

3. See steel pole detail drawings for specific dimension and orientation information.

4. Bond OPGW ground wire lead to pole ground nut at top of pole. See steel pole detail drawings for OPGW and Ground attachment dimensions.

SINGLE CIRCUIT TANGENT BRACED POST

STRUCTURE FRAMING DETAIL WEST CHEYENNE 115 kV DOUBLE CIRUIT TRANSMISSION LINE

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c l

Current power line is accessed with existing two-track. New structure locations will not increase access route.



If structures are not added to the line, increased frequency of outages for FEWAFB and Cheyenne residents can be expected.

Alternative #1 (Dismissed):

Remove overhead line and replace with underground cable. This alternative was dismissed based on cost, likelihood of approval by Public Utilities Commission (PUC), and unnecessary ground disturbance.



Warren to Skyline Electric Project Alternatives Considered and Dismissed Cheyenne, WY Existing Power Line Location of New Structures

Avian Protection



Avian Protection Plan Black Hills Energy Wyoming Operations





Revised 01/14/2019

BLACK HILLS ENERGY AVIAN PROTECTION PLAN

PROCEDURE NAME:	DATE ISSUED	POLICY NO.
Avian Protection Plan	2011-04-05	E-01-01-02
Applicable to:	DATE EFFECTIVE	PAGE NO.
Black Hills Energy Wyoming Electric, Natural Gas, and	2011-04-05	i
Generation Operations	DEPARTMENT	APPROVED
	Environmental	

Avian Protection Plan – Wyoming

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REVISION HISTORY CHANGE LOG

- APPENDIX A: RESPONSE AND REPORTING FLOWCHARTS
- APPENDIX B: PROTECTION OF RAPTORS
- APPENCIX C: CONTACTS
- APPENDIX D: PROTECTED SPECIES AND SPECIES OF CONCERN, WYOMING

APPENDIX E: SERVICE TERRITORY MAPS

APPENDIX F: BIRD MANAGEMENT POLICY

Revision History Change Log:

Date	Changes by	Changes made
2011-09-02	Joe Jenkins	Revisions made to USFWS permit requirements, clarification of terms, revised definitions
2015-04-09	Mike Pogany	Updated references to APLIC standards and contact information
2018-12-28	Joe Jenkins	Plan reviewed and revised to address corporate branding changes, and include new contacts to agencies, field agents, and operations contacts. Oil and Gas Operations removed. Midstream natural gas operations revised to include Source Gas acquisition in 2016. Wind energy siting and permitting strategies expanded and eagle permitting requirements for wind generations added. Avian incident tracking modified to remove the use of the BH Avian Incident Tracking System which was never fully developed or used. Since development, all records have been filed in the Environmental Services formal recordkeeping system.

2. PURPOSE

The Company's Wyoming Avian Protection Plan (APP or "Plan") provides guidance to mitigate the impact of company operations on protected bird species. Various federal treaties, acts, federal and state regulations and laws protect migratory birds, eagles and endangered species. These laws apply a strict liability approach to the "taking" of protected species, their parts, nests and habitat. Implementation of this Plan will reduce bird mortalities, incidents and negative interactions, and impacts to habitat. This Plan identifies actions needed to comply with legal requirements while continuing to provide the safe and reliable services provided by the company.

3. SCOPE

The Plan applies primarily to all Company operations in Colorado including Electric Distribution and Transmission, Generation, both fossil and wind fueled, and natural gas Midstream activities which may impact protected bird species.

NOTE: A separate Plan covers BHP Electric Distribution and Transmission, Generation Operations in South Dakota, Montana, and Nebraska.

4. **RESPONSIBILITY**

The personnel of the various Wyoming operations are responsible for implementing the Plan within their individual projects or systems.

Avian Protection Program Coordinator: The Avian Protection Program Coordinator (APPC) or designee is responsible for developing and documenting Program Standards, Procedures, and Practices, developing and implementing the Plan, communicating with regulatory agencies, and monitoring the implementation of the Plan.

Power Generation, Mining, Exploration and Production (E&P)/Midstream: Environmental personnel are responsible for managing aspects of the Plan including monitoring, incident investigation, reporting, and mitigation design and operational changes needed to appropriately reduce the risk of negative interactions with protected avian species.

Electrical Transmission/Distribution: Transmission/Distribution will delegate personnel who are responsible managing all aspects of the Plan including monitoring, incident investigation, reporting, and mitigation design and operational changes needed to appropriately reduce the risk of negative interactions with protected avian species.

Environmental Services: Environmental Services (ES) personnel assist operations to implement the plan including monitoring, incident investigation, reporting, and mitigation design and operational changes needed to appropriately reduce the risk of negative interactions with protected avian species.

Electric Construction Standards Committees: The Company's electrical design standards committees (transmission, distribution) are responsible for the approval of electrical structure and electrical design modifications needed to meet Plan requirements.

5. **DEFINITIONS**

<u>Active Nest</u> – A nest that has eggs or young present at the time of observation. A nest is considered inactive when eggs or young are not present, such as in the fall or winter, or if the nest is not used during breeding season. The term <u>occupied nest</u> is used synonymously.

<u>APP</u> – Avian Protection Plan

<u>APPC</u> – Avian Protection Program Coordinator which is a role assigned in the Environmental Services Department.

<u>APP-WY</u> - Company's Avian Protection Plan for its Wyoming operations.

BGEPA – the Bald and Golden Eagle Protection Act. The BGEPA prohibits knowingly taking, or taking with wanton disregard for the consequences of an activity, any bald or golden eagle or their body parts, nests, chicks or eggs, which includes collection, molestation, disturbance, or killing. The term "disturb" is defined as "to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, (1) injury to an eagle, (2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or (3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior

<u>ESA</u> – Endangered Species Act. The Endangered Species Act protects plants and animals that are listed by the federal government as "endangered" or "threatened.

Inactive Nest – A nest that does not have eggs or young at the time of observation. Term is used synonymously with <u>unoccupied nest</u>.

Lek: A lek is a gathering of males, of certain animal species, for the purposes of competitive mating display. Leks assemble before and during the breeding.

<u>MBTA</u> – Migratory Bird Treaty Act. The MBTA prohibits the taking of any migratory birds, their parts, nests, or eggs except as permitted by regulations and does not require intent to be proven.

<u>Migratory Bird</u> – The definition of the migratory birds that are protected by federal law were identified through various conventions. Migratory birds for purposes of the Migratory Bird Treaty Act include those defined in the Convention of Mar. 4, 1972, concluded with Government of Japan and the Convention of Nov. 19, 1976, concluded with Union of Soviet Socialist Republics. 1966 - Pub. L. 89-669 inserted "(39 Stat. 1702)" and defined migratory birds to include those defined in the Treaty of Feb. 7,1936 (50 Stat. 1311) with the United Mexican States.

The list of the Migratory Birds and bird species of concern identified can be found in Appendix D. The entire list of migratory birds can be forum at: <u>http://migratorybirds.fws.gov</u>

<u>Negative Interaction</u> – a situation that could or has resulted in take of a bird protected by the MBTA, BGEPA, and or ESA.

<u>Occupied Nest</u> – A nest with an incubating adult (sitting on eggs), or eggs or young present. Term is used synonymously with <u>active nest</u>. Nests may be occupied during the breeding season (approximately February through August).

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<u>Problem Nest</u> – A nest that may cause electrocution and death to the birds, electrical outage, property damage, or otherwise interfere with power operations.

<u>**Raptors**</u> – Birds of prey with exceptionally keen eyesight, a sharp, hooked beak for tearing flesh, and strong grasping feet with large, sharp talons for killing and holding prey; includes eagles, hawks, falcons, owls, buteos, osprey, and vultures. Raptors frequently use power poles for perching or nesting.

<u>Raptor Safe</u> – A power line configuration designed to eliminate raptor electrocution by having sufficient spacing between phases and phase to ground which provides safe perching areas on the pole.

<u>Take/Taking</u>: As defined by 50 CFR 10.12, take means to pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to pursue hunt, shoot, wound, kill, trap, capture, or collect.

<u>**Tended nest**</u> – Prior to egg-laying, birds construct or add materials to nests that they will occupy during the nesting season.

<u>Threatened & Endangered Species</u> – ESA-listed species and those that are threatened with extinction and protected by federal law. Specifically, an "endangered species" is one that is "in danger of extinction" throughout all or a significant portion of its range. A "threatened" species is one that is "likely to becomeendnagered" within the forseable future".

<u>Unoccupied Nest</u> – A nest that does not have eggs or young at the time of observation. Term is used synonymously with <u>inactive nest</u>.

<u>USFWS</u> – United States Fish and Wildlife Service, which is the regulatory agency that oversees the protection of wildlife and is a service under the Department of Interior.

- Wyoming Ecological Services, Cheyenne, Wyoming: This office can assist you with avoiding, minimizing and mitigating impacts to migratory birds, and may provide assistance in obtaining migratory bird permits from the Migratory Bird Permit Office.
- Migratory Bird Permit Office, Denver, Colorado: This office provides information about migratory bird permits and issues permits when appropriate.
- Law Enforcement, Wyoming. Law enforcement will provide you with information as to how to avoid violations under the ESA, MBTA, and BGEPA. Mortalities and injuries should be reported to law enforcement. Eagle mortalities need to be reported within 24 hours.

WGFD – Wyoming Game and Fish Department, which is the wildlife regulatory agency in Wyoming.

PROCEDURE

5.1 Communication of the Avian Protection Plan (APP)

5.1.1 Communicating the Plan

The Plan will be communicated throughout affected company operations to assure that personnel are aware of the company's avian protection policy and procedures. The Plan will be communicated through formal training, periodic management reports, electrical standards committee meetings, and ongoing environmental and operational meetings.

5.1.2 Training

Training will be provided to all affected employees who may discover or investigate avian incidents, engineers responsible for the design of raptor safe structures, and operational personnel who may be responsible for mitigating incidents through operation and maintenance activities. Training will be provided as part of the initial communication of the plan and thereafter as often as needed to assure compliance with the plan. The training will include:

- Identification of protected and non-protected species.
- Review of applicable regulations including the Migratory Bird Treaty Act (MBTA), the Bald and Golden Eagle Protection Act (BGEPA), the Endangered Species Act (ESA), and state regulations to ensure personnel are aware of the legal requirements and the potential liability associated with non-compliance.
- Bird biology and behavior related to interactions (collision or electrocution) with power structures including bird sizes, perching, and nesting, hunting and feeding habits, as well as habitat preferences and flight path tendencies.
- Bird biology and behavior related to interactions with facility buildings and other structures that may provide perching, nesting, hunting or feeding habitats.
- Discussion of the state and federal agencies that may need to be contacted and how soon following the incident they should be contacted.
- Proper procedures to follow when an avian incident is encountered.
- Internal and external reporting requirements for all incidents.
- The use of GIS applications to track and map locations of avian incidents and nesting.
- Use of the US Fish and Wildlife Service (USFWS) Bird Fatality/Injury Reporting Program for incidents related to electrical systems.
- A discussion regarding "High Use Areas" where high year-round and seasonal bird concentrations may occur.

- Emphasis is to be placed on specific examples and corrective actions that are operations specific. For example: Electric operations should discuss separation and insulation concepts and applications, perch preventers, substitute perches, and nest platforms; expectations for corrective actions on lines and equipment where mortalities have occurred; and circumstances where no meaningful remedial steps can be reasonably taken such as weather, unavoidable biological interactions, or other contributory factors. Natural gas midstream operations should discuss descriptions of when and how to apply exclusionary devices such as caps or nets to prevent nesting in stacks and exposure to tanks and containers which may hold water with petroleum and other contaminants.
- Use of additional training videos or other materials when available from the USFWS, the Avian Power Line Interaction Committee or the Edison Electric Institute, and other resources as identified.

5.1.3 External Communication of the APP

The APP will be provided upon request to federal and state agencies. A copy of this plan is available online on the Company's intranet site and available to all affected facilities.

5.2 Investigating Avian Incidents

Operations personnel will ensure that the causes of "negative interactions" are investigated and the implementation of mitigation or preventative measures are completed where needed. Appendix A provides a general flowchart of steps to take when incidents occur. Appendix C provides a list of company personnel, and state and federal contacts.

5.2.1 Identification of Dead or Injured Birds

Employees will immediately report to their supervisor and ES Coordinator all protected birds found dead or injured within the company's operation areas or rights-of-way.

5.2.2 Bird Handling Restrictions and Public Safety Considerations

Field personnel will not attempt to handle, capture, collect, move, or transport any injured or dead protected bird.

Safety Exception: If required to ensure public safety, the safety of company personnel, and/or its operations, equipment or electrical systems, a bird may be moved away from a structure or piece of electrical equipment provided the proper personnel and agencies are notified as soon as possible after removal.

USFWS Authorization: Specific permission from an authorized agent of the USFWS is required to transport, collect, or capture a protected bird or eggs. Injured birds should only be handled by the USFWS, the State agency or a local rehabilitator (see Appendix C, Contact List) who has the appropriate authorization to handle protected birds.

5.2.3 Transportation of Injured Birds

To facilitate transportation of all injured birds to a rehabilitator, call the FWS Law Enforcement or Ecological Services Office to report the injury. Per communication with the FWS, BHC has been given permission to transport the bird to one of the listed rehabilitators as soon as possible. Contact the selected rehabilitator to ensure they will be able to receive and have capacity to care for the injured bird.

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After the injured bird is transported to the rehabilitator, provide documentation to FWS Law Enforcement or Ecological Services Office, preferably by email. Documentation should include:

- 1. Who found the bird,
- 2. When and where the bird was found,
- 3. The date and time the Service was notified,
- 4. Suspected cause of injury and bird species involved,
- 5. Type and severity of injury,
- 6. Who transported the bird,
- 7. Name of the rehabilitator, and
- 8. When it arrived at the rehabilitation center.

5.2.4 Photographic Documentation

Whenever feasible, the incident investigator will take picture sufficient to support the findings of the investigation. Take photos of the bird and it's location as initially found and the surrounding area. If electric systems are involved, the structure and any electrical equipment involved or suspected to be involved; the line including other structures to show that similar conditions exist or not. If feasible, take photos from above and below the equipment and top of structure.

5.2.5 Field Report Form

When obtaining information related to a negative interaction or nesting situation, use the Field Report Form available on the ES MyBHC Avian protection webpage. Provide as much information as possible to facilitate communication with agencies regarding the incident.

5.3 Tracking, Monitoring, and Reporting Negative Interactions and Corrective Actions

The Company will track information about "negative interactions" between protected birds and Company facilities.

5.3.1 USFWS Bird Fatality/Injury Reporting Program

Responsible personnel will report all negative interactions involving the fatality of any protected bird species associated with electrical systems to the USFWS through an online program available at https://birdreport.fws.gov and/or report directly to a field agent as requested. This reporting program also provides a clearinghouse of information for the electric utility industry to mitigate the impact of electrical systems in the loss of birds.

This program is ONLY applicable to reporting negative avian interactions from electric operations. It is not to be used for reporting incidents at either coal mining or E&P facilities.

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5.3.2 Avian Incident Tracking and Recordkeeping

ES will administer the tracking system. Operations personnel or ES will document all incidents, record investigation findings and document actions taken to mitigate future impacts. All documents will be filed in the ES records system.

5.4 Evaluation of Avian High Use Areas

Evaluations of company territory, operations and facilities for high bird use areas may be performed to minimize impacts. Evaluations may include scientific studies and literature, breeding bird surveys, winter bird counts, observations and other relevant information. The evaluations may be used to identify areas where mitigation efforts can reduce negative interactions before they occur. The APPC or designee will be responsible for obtaining evaluations as warranted.

5.5 Nest Management

Company personnel will ensure that active and inactive nests are properly managed and permits are obtained, from the USFWS and WGFD as required before action is taken. Any nest, active or inactive, that is moved by company personnel will be documented in the ES records system. Impacts to existing nest sites during construction of new projects or systems will be evaluated.

5.5.1 Active Nests

Active nests of protected bird species are regulated under the Migratory Bird Treaty Act. Moving active nests requires approval from USFWS and WGFD and has to be completed under permits issued by the USFWS and WGFD. ES can assist with communications and obtaining permits, if needed.

5.5.2 Tended Nests

Although only active/occupied nests of species other than eagles are protected under the MBTA, awareness of tended nests on or near company property provides time to address the need for nest management action before eggs or hatchlings are present. The presence of eggs or hatchlings reduce the options and increase the potential for negative interactions.

5.5.3 Inactive Nests

<u>Except for eagle nests</u>, unoccupied nests that need to be removed, can be removed without a reporting requirement or permit from the USFWS but a permit is still required from the WGFD. Note that many bird species will continue to use the same location for nesting year after year. Annually, a review of locations known to be nesting sites should be inspected for nesting activity. If activity is identified, ES should be contacted immediately.

Eagles may reuse nests for decades and they have been granted special status under the Bald and Golden Eagle Protection Act. All operations will consult with ES before moving an eagle nest. Permits will have to be obtained from the USFWS and WGFD before an active or inactive eagle nest can be moved. However, if there is a clear, imminent danger posed to workers, the provision of safe and reliable electrical service, or other operations, a nest may be moved, provided that the USFWS and WGFD are consulted prior to the move and permits obtained for the incident after the fact.

5.6 Permit Requirements

The USFWS no longer issues permits for the removal of live or dead birds. Permits may be required to move nests, eggs or young. The permit process generally takes a substantial amount of time which may exacerbate the situation so every attempt should be made to obtain immediate verbal permission from an agency to rectify situations which are within their authorization.

Operations is responsible to report incidents immediately to ES. Operations and ES will then coordinate and provide the information to the USFWS and to the State agency, file all records in the ES records system, and obtain permits, if required.

The U.S. Fish and Wildlife Service (FWS) has developed the Eagle Conservation Plan Guidance (ECPG). This document provides specific in-depth guidance for conserving bald and golden eagles in the course of siting, constructing, and operating wind energy facilities. The ECPG guidance supplements the Land-Based Wind Energy Guidelines. Associated with the ECPG, the FWS has developed a, Eagle Take Permit that authorizes the take of bald and golden eagles when the take is associated with an otherwise lawful activity if there is a significant potential that eagles could have negative interaction with the wind energy facilities. The Company will apply for eagle take permits whenever deemed appropriate based on assessments of the impact of any new facility prior to its construction. See §5.7.5 for additional information for the use of eagle take permits associated with the construction of wind generation facilities.

Agency contacts are provided in Appendix C of this APP.

5.6.1 US Fish and Wildlife (USFWS) Permits

Local USFWS personnel should be contacted when a mortality, injury or nesting incident occurs. For mortalities the USFWS can usually give verbal authorization to remove and properly dispose of a carcass but they may also want to investigate the situation. For injured birds the USFWS may also give verbal authorization to remove and transport a bird to a rehabilitator. For certain injured bird species such as raptors or T&E the agency may need to handle those birds themselves or request the WGFD or a permitted rehabilitator retrieve the birds.

When verbal approval is given or the incident is referred to the WGFD or authorized rehabilitator a permit should not be needed. For nest starts or unoccupied nests of all species except for eagles and T&E a permit is not required from the USFWS to remove those nests as long as eggs and young are not present. A USFWS permit is generally required to remove all bald or golden eagle nests (active or inactive) and all active nests of other species where eggs or young are present.

5.6.2 Wyoming Game and Fish Department (WGFD) Permits

Local WGFD personnel should be contacted when a mortality, injury or nesting incident occurs. Verbal approval from the WGFD may be obtained in many instances and in such case where verbal approval is given a permit should not be required. For mortalities the WGFD can usually give verbal authorization to remove and properly dispose of a carcass.

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For injured birds, the WGFD may also give verbal authorization to remove and transport a bird to a rehabilitator. For certain injured bird species such as raptors or threatened or endangered (T&E) the agency may need to handle those birds themselves.

For new nest starts where eggs or young are not present and have never been produced, a permit may not be needed but that should be verified through contact with the WGFD prior to removal of the nest start. For existing nests where eggs or young are present or have been produced in the past a WGFD Chapter 33 Permit, as described in Section 7 of this APP, may be required. Again the WGFD should be first contacted and may be able to give verbal authorization for those activities without the need of a formal permit.

5.7 Avian Protection Measures for Company Operations

5.7.1 Electric Construction Design Standards

The Company's Electric Construction Design Standards Committee has developed Electrical Construction Standards for both transmission and distribution which incorporate the following guidance in addressing avian protection measures. These Company Standards are available on the Company's Engineering intranet webpage.

- <u>Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006</u>, published by the Avian Power Line Interaction Committee (APLIC), the Edison Electric Institute and the California Energy Commission. 2006. Washington, D.C. and Sacramento, CA.
- <u>Reducing Bird Collisions with Power Lines The State of the Art in 2012</u> Edison Electric Institute, and APLIC, Washington, D.C.

5.7.2 Avian Protection Measures for Electrical Structures

The Company's electric design standards will be used for each of the following situations.

Siting New Electrical Lines: Siting New Electrical Lines: Avian protection measures will be taken into consideration when siting new electrical lines.

New Line Construction: Avian-safe designs will be employed for all new construction. In areas with known populations of raptors or other birds of concern, new lines will be designed with adequate separations for birds.¹

Retrofit of Existing Lines: Where studies or avian incidents have deemed necessary, lines will be rebuilt or retrofitted to avian-safe standards.

Isolated incidents: If a death or injury of a bird is due to electrocution, the structure will be retrofitted to avian safe standards as soon as feasible.

5.7.3 Avian Protection Measures for Other Structures and Facilities

Every effort will be made to construct facilities and structures at generation facilities, drilling sites, midstream facilities including compressor stations, and mining operations in such a manner as to minimize impact to protected avian species. Where feasible new facilities are typically designed and constructed to minimize access to protected species; and netting or mesh will be placed over containers, tanks, and emission stacks to prevent access to hydrocarbons and hazardous or toxic substances, emissions and heat.

Isolated incidents: If a death or injury of a bird is discovered, the structure, container, tank, emission stack, or other feature will be evaluated and repaired or retrofitted to avian safe standards as soon as feasible.

5.7.4 Avian Protection Measures for Construction Sites

If a death or injury of a bird is discovered, the structure, container, tank, emission stack, or other feature will be evaluated and repaired or retrofitted to avian safe standards as soon as feasible.

5.7.5 Avian Protection Measures for Wind Energy Facilities

The company follows a tiered approach for assessing potential adverse effects to avian species of concern and their habitats. During preconstruction, the company will work to identify, avoid and minimize risks to species of concern. This is accomplished by performing preliminary site evaluations and extensive bird and bat surveys to confirm the selected location will present limited impact to the identified species. Once the site is constructed, the company continues to assess whether actions taken in the earlier evaluations are successfully achieving the goals, and when necessary, will take additional steps to reduce impacts.

The company will work with applicable governmental agencies to determine if additional evaluations are needed to reduce potential impacts following the preliminary field studies. If the results of the preliminary site assessment indicate that one or more species of concern are present, the company will consider applicable regulatory processes for addressing. If migratory birds and bats are likely to experience significant adverse impacts by a wind project at the

¹ <u>Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006</u>, published by the Avian Power Line Interaction Committee (APLIC), the Edison Electric Institute and the California Energy Commission. 2006. Washington, D.C. and Sacramento, CA. Page 60.

proposed site, the company will identify and document possible actions that will avoid or compensate for those impacts, such as altering locations of turbines or arrays, operational changes, or compensatory mitigation.

As soon as the company anticipates that a wind energy project is likely to result in a take of bald or golden eagles, the company will prepare an Eagle Conservation Plan (ECP) and, if necessary, apply for a programmatic take permit. A minimum of two years of eagle surveys is recommended for an ECP and take permit. With the additional field studies and agency coordination a three-year total time table will be planned for ECP and take permit preparation. The time to acquire a take permit is very dependent on the project and the company will start the process as soon as practicable for the project to ensure necessary approvals are obtained prior to facility operation.

5.8 Periodic Inspections

The company performs a number of operational and maintenance inspections of facilities on a regularly scheduled basis (monthly, annually). These inspections are documented and include awareness of avian issues and provide for a random check of facilities. Employees finding evidence of negative interactions during these inspections are required to inform ES when such evidence is encountered. These inspections are performed for exploration and production, mining and electric operations and facilities. If employees find negative interactions not related to company activities, but rather related to other utility or business operations, those interactions will be reported to ES and the appropriate business entity.

5.9 Assessments

5.9.1 Annual Assessment

The APPC will compile an annual report of all incidents including fatalities, nonfatality and nesting incidents based upon information filed in the ES records system. The APPC will distribute the report to affected operations for review.

5.9.2 Electric Systems (USFWS Reporting Database)

The USFWS Bird Fatality/Injury Reporting Program at <u>http://birdreport.fws.gov</u> provides report development processes for all incidents involving the fatality of a protected bird. A report of this information to USFWS is not planned since this information is publicly available.

5.9.3 Wyodak Mine

Annual wildlife monitoring, conducted since 1986, meets requirements of the Wyoming Department of Environmental Quality/Land Quality Division (WDEQ/LQD), WGFD, Office of Surface Mining (OSM) and the USFWS. Surveys are conducted periodically. Results are presented annually in the Annual Mining Report submitted to the WDEQ/LQD and OSM and are also available for public review. The study area includes the Wyodak Mine permit boundary and one-mile perimeter which includes the Neil Simpson generation facilities. A review of mining activities will be summarized in the annual report

(§5.9.1) by reviewing guarterly surveys described below and any information in the ES recordkeeping system.

In addition to the annual monitoring report filed with the WDEQ/LQD. Wvodak submits a "Monitoring and Mitigation Plan for Raptors and Species of High Federal Interest" to the USFWS every five years. The current plan is included in Addendum MP-C of the Mine Plan and was approved by the USFWS on March 10, 2006.

Surveys conducted at Wyodak Mine include:

Winter – February & March •

Raptor nesting surveys for the early nesting species including great horned owls and golden eagles.

Spring – March, April & Mav

- Surveys of raptors to monitor nests previously located and search for _ new nests.
- Surveys of game birds to record lek locations and number of birds using leks.
- Surveys for threatened or endangered ((T&E) and Migratory Birds of High Federal Interest (MBHFI) species.

Summer – June, July & August

- Survey of raptor production for nests previously located and search for _ nest sites of late nesting raptors.
- Record opportunistic observations of all wildlife species and surveys for T&E species and MBHFI species.
- Lagomorph density surveys of the permit area. _

5.9.4 Natural Gas Midstream Operations

Natural Gas Midstream personnel will record avian interaction observations when observed or monthly as part of the Spill Prevention Control and Countermeasure (SPCC) monthly inspection process. Annually in the first quarter, ES will compile information for the previous year, into a report that summarizes available information, distribute it in management reports, and share trends with the affected operations and company management. This information will be summarized in the annual report described in section 5.8.1.

6. RECORDS

- USFWS Bird Fatality/Injury Reporting Program at http://birdreport.fws.gov.
- Black Hills Environmental Services Records

7. REFERENCES

7.1 **Regulatory References**

- 7.1.1 Bald and Golden Eagle Protection Act, 16 U.S.C. §§ 668 to 668d
- 7.1.2 Migratory Bird Treaty Act, 16 U.S.C. §§ 703 to 712
- 7.1.3 Endangered Species Act, 16 U.S.C. §§ 1531 to 1544
- 7.1.4 Wyoming Game and Fish Department Chapter 33 Regulations

7.2 Technical References

7.2.1 Construction Standards

- <u>Electric Transmission and Distribution Standards</u>: available online on the Company's intranet site, BEN, file path: *BEN/Departments/Transmission and Engineering Services/Transmission and Distribution Engineering*
- <u>Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006</u>, published by the Avian Power Line Interaction Committee (APLIC), the Edison Electric Institute and the California Energy Commission. 2006. Washington, D.C. and Sacramento, CA.
- <u>Reducing Bird Collisions with Power Lines The State of the Art in 2012</u> Edison Electric Institute, and APLIC, Washington, D.C.
- <u>Avian Protection Plan Guidelines</u>, published by the Edison Electric Institute's Avian Power Line Interaction Committee and the US Fish and Wildlife Service. 2005.

7.2.2 Other References

- <u>A Pocket Guide To Kansas Raptors</u>. This guide, which is published by the Friends of the Great Plains Nature Center, provides a reference to raptors found in the Midwest and West.
- <u>Peterson Field Guide to Birds of Western North America</u>. 2010. Fourth Edition. Houghton Mifflin Company. Boston, MA. Available from Amazon Books.
- <u>Migratory Bird List: http://migratorybirds.fws.gov/</u>

See Appendix D for the complete list of protected migratory bird species as of May 2010 in Wyoming.

• Guidance on active nesting buffers: See Appendix B

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APPENDIX A: RESPONSE AND REPORTING FLOWCHARTS

Response to Finding a Dead or Injured Bird



Brid Reporting Detailed Flow Chart



APP = Avian Protection Plan, APPC* = Avian Protection Plan Coordinator and/or designee, FWS = Fish and Wildlife Service

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APPENDIX B: PROTECTIONS FOR RAPTORS/SEASONAL BUFFER ZONES

Raptors in Wyoming

(http://www.fws.gov/wyominges/Pages/Species/Species_SpeciesConcern/Raptors.html)

Raptors, or birds of prey, and the majority of other birds in the United States are protected by the <u>Migratory Bird Treaty Act</u>, 16 U.S.C. 703 (MBTA). A complete list of migratory bird species can be found in the Code of Federal Regulations at <u>50 CFR 10.13</u>. Eagles are also protected by the <u>Bald and Golden</u> <u>Eagle Protection Act</u>, 16 U.S.C. 668 (Eagle Act).

The MBTA protects migratory birds, eggs and nests from possession, sale, purchase, barter, transport, import, export, and take. The regulatory definition of take, defined in <u>50 CFR 10.12</u>, means to pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to hunt, shoot, wound, kill, trap, capture, or collect a migratory bird. Activities that result in the unpermitted take (e.g., result in death, possession, collection, or wounding) of migratory birds or their eggs are illegal and fully prosecutable under the MBTA. Removal or destruction of active nests (i.e., nests that contain eggs or young), or causing abandonment of an active nest, could constitute a violation of the MBTA, the Eagle Act, or both statutes. <u>Removal of any active migratory bird nest or any structure that contains an active nest (e.g., tree) where such removal results in take is prohibited</u>. Therefore, if nesting migratory birds are present on or near a project area, project timing is an important consideration during project planning. As discussed below, the Eagle Act provides additional protections for bald and golden eagles and their nests. For additional information concerning nests and protections under the MBTA, please see the U.S. Fish and Wildlife Service's (Service) <u>Migratory Bird Permit Memorandum, MBMP-2</u>.

The Service's Wyoming Ecological Services Field Office works to raise public awareness about the possible occurrence of birds in proposed project areas and the risk of violating the MBTA, while also providing guidance to minimize the likelihood that take will occur. We encourage you to coordinate with our office before conducting actions that could lead to the take of a migratory bird, their young, eggs, or active nests (e.g., construction or other activity in the vicinity of a nest that could result in a take). If nest manipulation is proposed for a project in Wyoming, the project proponent should also contact the Service's Migratory Bird Office in Denver at 303-236-8171 to see if a permit can be issued. Permits generally are not issued for an active nest of any migratory bird species, unless removal of the nest is necessary for human health and safety. If a permit cannot be issued, the project may need to be modified to ensure take of migratory birds, their young or eggs will not occur.

For infrastructure (or facilities) that have potential to cause direct avian mortality (e.g., wind turbines, guyed towers, airports, wastewater disposal facilities, transmission lines), we recommend locating structures away from high avian-use areas such as those used for nesting, foraging, roosting or migrating, and the travel zones between high-use areas. If the wildlife survey data available for the proposed project area and vicinity do not provide the detail needed to identify normal bird habitat use and movements, we recommend collecting that information prior to determining locations for any infrastructure that may create an increased potential for avian mortalities. We also recommend contacting the Service's Wyoming Ecological Services office for project-specific recommendations.

Additional Protections for Eagles

The Eagle Act protections include provisions not included in the MBTA, such as the protection of unoccupied nests and a prohibition on disturbing eagles. Specifically, the Eagle Act prohibits knowingly taking, or taking with wanton disregard for the consequences of an activity, any bald or golden eagle or their body parts, nests, chicks or eggs, which includes collection, possession, molestation, disturbance, or killing. The term "disturb" is defined as "to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, (1) injury to an eagle, (2) a decrease in its productivity, by substantially

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interfering with normal breeding, feeding, or sheltering behavior, or (3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior" (50 CFR 22.3 and see also 72 FR 31132).

The Eagle Act includes limited exceptions to its prohibitions through a permitting process. The Service has issued regulations concerning the permit procedures for exceptions to the Eagle Act's prohibitions (74 FR 46836), including permits to take golden eagle nests which interfere with resource development or recovery operations (50 CFR 22.25). The regulations identify the conditions under which a permit may be issued (i.e., status of eagles, need for action), application requirements, and other issues (e.g., mitigation, monitoring) necessary in order for a permit to be issued.

For additional recommendations specific to Bald Eagles please see our **Bald Eagle information web page**.

Recommended Steps for Addressing Raptors in Project Planning

Using the following steps in early project planning, agencies and proponents can more easily minimize impacts to raptors, streamline planning and permitting processes, and incorporate measures into an adaptive management program:

- 1. Coordinate with appropriate Service offices, Wyoming Game and Fish Department, Tribal governments, and land-management agencies at the earliest stage of project planning.
- Identify species and distribution of raptors occurring within the project area by searching existing data sources (e.g., Wyoming Game and Fish Department, Federal land-management agencies) and by conducting on-site surveys.
- 3. Plan and schedule short-term and long-term project disturbances and human-related activities to avoid raptor nesting and roosting areas, particularly during crucial breeding and wintering periods
- 4. Determine location and distribution of important raptor habitat, nests, roost sites, migration zones and, if feasible, available prey base in the project impact area.
- 5. Document the type, extent, timing, and duration of raptor activity in important use areas to establish a baseline of raptor activity.
- 6. Ascertain the type, extent, timing, and duration of development or human activities proposed to occur, and the extent to which this differs from baseline conditions.
- 7. Consider cumulative effects to raptors from proposed projects when added to past, present, and reasonably foreseeable actions. Ensure that project mitigation adequately addresses cumulative effects to raptors.
- 8. Minimize loss of raptor habitats and avoid long-term habitat degradation. Mitigate for unavoidable losses of high-valued raptor habitats, including (but not limited to) nesting, roosting, migration, and foraging areas.
- 9. Monitor and document the status of raptor populations and, if feasible, their prey base post project completion, and evaluate the success of mitigation efforts.
- 10. Document meaningful data and evaluations in a format that can be readily shared and incorporated into wildlife databases (contact the Service's Wyoming Ecological Services office for details).

Protection of nesting, wintering (including communal roost sites), and foraging activities is considered essential to conserving raptors. In order to promote the conservation of migratory bird populations and their habitats, Federal agencies should implement those strategies directed by <u>Executive Order 13186</u>, "Responsibilities of Federal Agencies To Protect Migratory Birds" (66 FR 3853).

Recommended Seasonal and Spatial Buffers to Protect Nesting Raptors

Because many raptors are particularly sensitive to disturbance (that may result in take) during the breeding season, we recommend implementing spatial and seasonal buffer zones to protect individual nest sites/territories (Table 1). The buffers serve to minimize visual and auditory impacts associated with human activities near nest sites. Ideally, buffers would be large enough to protect existing nest trees and provide for alternative or replacement nest trees. The size and shape of effective buffers vary depending on the topography and other ecological characteristics surrounding the nest site. In open areas where there is little or

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no forested or topographical separation, distance alone must serve as the buffer. Adequate nesting buffers will help ensure activities do not take breeding birds, their young or eggs. For optimal conservation benefit, we recommend that no temporary or permanent surface occupancy occur within species-specific spatial buffer zones. For some activities with very substantial auditory impacts (e.g., seismic exploration and blasting) or visual impacts (e.g., tall drilling rig), a larger buffer than listed in Table 1 may be necessary, please contact the Service's Wyoming Ecological Services office for project specific recommendations on adequate buffers.

As discussed above, for infrastructure that may create an increased potential for raptor mortalities, the spatial buffers listed in Table 1 may not be sufficient to reduce the incidence of raptor mortalities (for example, if a wind turbine is placed outside a nest disturbance buffer, but inadvertently still within areas of normal daily or migratory bird movements); therefore, please contact the Service's Wyoming Ecological Services office for project specific recommendations on adequate buffers.

Buffer recommendations may be modified on a site-specific or project-specific basis based on field observations and local conditions. The sensitivity of raptors to disturbance may be dependent on local topography, density of vegetation, and intensity of activities. Additionally, individual birds may be habituated to varying levels of disturbance and human-induced impacts. Modification of protective buffer recommendations may be considered where biologically supported and developed in coordination with the Service's Wyoming Ecological Services Field Office.

Because raptor nests are often initially not identified to species (e.g., preliminary aerial surveys in winter), we first recommend a generic raptor nest seasonal buffer guideline of January 15th – August 15th. Similarly, for spatial nesting buffers, until the nesting species has been confirmed, we recommend applying a 1-mile spatial buffer around the nest. Once the raptor species is confirmed, we then make species-specific and site-specific recommendations on seasonal and spatial buffers (Table 1).

Activities should not occur within the spatial/seasonal buffer of any nest (occupied or unoccupied) when raptors are in the process of courtship and nest site selection. Long-term land-use activities and human-use activities should not occur within the species-specific spatial buffer of occupied nests. Short-term land use and human-use activities proposed to occur within the spatial buffer of an occupied nest should only proceed during the seasonal buffer after coordination with the Service, State, and Tribal wildlife resources management agencies, and/or land-management agency biologists. If, after coordination, it is determined that due to human or environmental safety or otherwise unavoidable factors, activities require temporary incursions within the spatial and seasonal buffers, those activities should be planned to minimize impacts and monitored to determine whether impacts to birds occurred. Mitigation for habitat loss or degradation should be identified and planned in coordination with applicable agencies.

Please contact the Service's Wyoming Ecological Services Field Office if you have any questions regarding the status of the bald eagle, permit requirements, or if you require technical assistance regarding the MBTA, Eagle Act, or the above recommendations. The recommended spatial and seasonal buffers are voluntary (unless made a condition of permit or license) and are not regulatory, and they do not supersede provisions of the MBTA, Eagle Act, <u>Migratory Bird Permit Memorandum (MBMP-2</u>), and Endangered Species Act. Assessing legal compliance with the MBTA or the Eagle Act and the implementing regulations is ultimately the authority and responsibility of the Service's law enforcement personnel. Our recommendations also do not supersede Federal, State, local, or Tribal regulations or permit conditions that may be more restrictive.

 Table 1. Service's Wyoming Ecological Services Field Office's Recommended Spatial and Seasonal Buffers for Breeding Raptors for construction projects, <u>excluding</u> wind energy. For information on wind energy projects please contact the <u>Wyoming Ecological Services Office</u> (307) 772-2374.

Raptors of Conservation Concern (see below for more information)

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Common Name Golden Eagle Ferruginous Hawk Swainson's Hawk Bald Eagle Prairie Falcon Peregrine Falcon Short-eared Owl Burrowing Owl	0.5 0.5 0.25 0.25	Seasonal buffer January 15 - July 31 March 15 - July 31 April 1 - August 31 gle information web page March 1 - August 15 March 1 - August 15 March15- August 1 April 1 – September 15
Northern Goshawk	0.5	April 1 - August 15
Additional Wyoming Raptors Common Name	Spatial buffer (miles)	Seasonal buffer
Osprey	0.25	April 1 - August 31
Cooper's Hawk	0.25	March 15 – August 31
Sharp-shinned Hawk	0.25	March 15 – August 31
Red-tailed Hawk	0.25	February 1 – August 15
Rough-legged Hawk (winter resident only)		
Northern Harrier	0.25	April 1 - August 15
Merlin	0.5	April 1 - August 15
American Kestrel	0.125	April 1 – August 15
Common Barn Owl	0.125	February 1 – September 15
Northern Saw-whet Owl	0.25	March 1 - August 31
Boreal Owl	0.25	February 1 – July 31
Long-eared Owl	0.25	February 1 – August 15
Great Horned Owl	0.125	December 1 – September 31
Northern Pygmy-Owl	0.25	April 1 – August 1
Eastern Screech -owl	0.125	March 1 – August 15
Western Screech-owl Great Gray Owl	0.125 0.25	March 1 – August 15 March 15 – August 31

Raptors of Conservation Concern

The Service's <u>Birds of Conservation Concern (2008)</u> report identifies "species, subspecies, and populations of all migratory nongame birds that, without additional conservation actions, are likely to become candidates for listing" under the Endangered Species Act (16 U.S.C 1531 et seq.). This report is intended to stimulate coordinated and proactive conservation actions among Federal, State, and private partners. The <u>Wyoming</u> <u>Partners in Flight Wyoming Bird Conservation Plan</u> identifies priority bird species and habitats, and establishes objectives for bird populations and habitats in Wyoming. This plan also recommends conservation actions to accomplish the population and habitat objectives.

We encourage project planners to develop and implement protective measures for the Birds of Conservation Concern as well as other high-priority species identified in the Wyoming Bird Conservation Plan. For additional information on the Birds of Conservation Concern that occur in Wyoming, please see our <u>Birds of Conservation</u> <u>Concern</u> web page.

Additional Planning Resources

Avian Power Line Interaction Committee (APLIC). 2006. Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006. Edison Electric Institute, APLIC, and the California Energy Commission. Washington, D.C. and Sacramento, CA.

Edison Electric Institute and the Raptor Research Foundation. 1996. Suggested Practices for Raptor Protection on Power Lines - The State of the Art in 1996. Washington, D.C.

Edison Electric Institute's Avian Power Line Interaction Committee and U.S. Fish and Wildlife Service. 2005. Avian Protection Plan Guidelines.

Edison Electric Institute and the Raptor Research Foundation. 1994. Mitigating Bird Collisions with Power Lines - The State of the Art in 1994. Washington, D.C.

U.S. Fish and Wildlife Service. 2000. Siting, Construction, Operation and Decommissioning of Communications Towers and Tower Site Evaluation Form (Directors Memorandum September 14, 2000), Arlington, Virginia.

U.S. Fish and Wildlife Service. 2007. National Bald Eagle Management Guidelines. United States Department of Interior, Fish and Wildlife Service, Arlington, Virginia. 23 pp.

Wyoming Game and Fish Department Internet Link to Raptor Information

<u>References</u>

50 CFR Parts 13 and 22 – Code of Federal Regulations. Eagle Permits; Revisions to Regulations for Eagle Incidental Take and Take of Eagle Nests.

50 CFR 10.12 – Code of Federal Regulations. Title 50--Wildlife and Fisheries, Chapter I--United States Fish and Wildlife Service, Department of the Interior, Part 10--General Provisions.

50 CFR 10.13– Code of Federal Regulations. Title 50--Wildlife and Fisheries, Chapter I--United States Fish and Wildlife Service, Department of the Interior, Part 10--General Provisions.

50 CFR 22.3 – Code of Federal Regulations. Title 50--Wildlife and Fisheries, Chapter I--United States Fish and Wildlife Service, Department of the Interior, Part 22—Eagle Permits.

50 CFR 22.25– Code of Federal Regulations. Title 50--Wildlife and Fisheries, Chapter I--United States Fish and Wildlife Service, Department of the Interior, Part 22—Eagle Permits.

<u>66 FR 3853 - Presidential Documents. Executive Order 13186 of January 10, 2001. Responsibilities of Federal Agencies To Protect Migratory Birds. Federal Register, January 17, 2001.</u>

72 FR 31132 - Protection of Eagles; Definition of "Disturb". Final Rule. Federal Register, June 5, 2007.

74 FR 46836 - Eagle Permits; Take Necessary To Protect Interests in Particular Localities. Final Rule. Federal Register, September 11, 2009.

U.S. Fish and Wildlife Service. 2003. Migratory Bird Permit Memorandum, MBMP-2, Nest Destruction (Directors Memorandum April 15, 2003), Washington, D.C.

U.S. Fish and Wildlife Service. 2008. Birds of Conservation Concern 2008. United States Department of Interior, Fish and Wildlife Service, Division of Migratory Bird Management, Arlington, Virginia. 85 pp.

Last updated: December 2018

APPENDIX C: CONTACTS (NAMES AND PHONE NUMBERS AS OF DECEMBER 2018.)

Black Hills Energy

Avian Protection Plan Coordinator (APPC) Nathan Groh, Office 307-778-2115, Cell 402-660-3232

Black Hills Energy WY (Electric and Gas/Midstream Operations) Nathan Groh, Office 307-778-2115, Cell 402-660-3232

Black Hills Energy SD ES (responsible for Electric system in NW WY) Shannon Pollmiller, Office 605-399-5121, Cell 719-323-1729

Black Hills Energy SD Operations (responsible for Electric system in NW WY) Dan Kline, Director Transmission & Engineering, Office 605-721-1396, Cell 515-491-3498

Black Hills Power - Generation Jeremy Hayes, Gillette WY, Office 307-687-8730, Cell 307-670-1845

Wyodak Mine Shane Gasvoda, Gillette WY, Office 307-687-8932, Cell 307-680-5769

US Fish and Wildlife Service

Special Agent Montana – Wyoming Terry Thibeault Billings MT, 406-247-7356 Special Agent Roy Brown, Lander WY, Office 307-332-7607 Ecological Services, Cheyenne WY, Office 307-772-2374 Migratory Bird Permit Office, Denver CO, 303-236-8171

Wyoming Game and Fish Department

For Game Wardens see <u>https://wgfd.wyo.gov/Law-Enforcement/Field-Personnel-Contact-Info/Warden-contact-info</u> For Regional Offices see <u>https://wgfd.wyo.gov/regional-offices</u> Cheyenne Office, 307-777-4600

Raptor Rehabilitators

Dr. Robert Farr, Cheyenne Pet Clinic, Cheyenne, 307-635-4121 Diane Morse, Gillette, 307-682-2532

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APPENDIX D: PROTECTED SPECIES AND SPECIES OF CONCERN, WYOMING

Wyoming Partners in Flight: Wyoming Bird Conservation Plan, Version 2.0, 1 May 2003

- Table 1:
 Level I Species Conservation Action
- Table 2: Level II Species Monitoring
- Table 3: Level III Species Local Interest
- Table 4:
 Level IV Species Not Considered Priority
- Table 5:Fish and Wildlife Service's Wyoming Ecological Services Field Office's Recommended
Spatial and Seasonal Buffers for Breeding Raptors
- Table 6: Birds Protected by the Migratory Bird Treaty Act

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Table 1.

Level I (Conservation Action). Species clearly needs conservation action (CA). Declining population trend and/or habitat loss may be significant. Includes species of which Wyoming has a high percentage of and responsibility for the breeding population (R), monitoring (M), and the need for additional knowledge (K) through research into basic natural history, distribution, etc.

Species

American Bittern Trumpeter Swan^a Bald Eagle^a Northern Goshawk Swainson's Hawk Ferruginous Hawk Peregrine Falcon Greater Sage-Grouse^a **Columbian Sharp-tailed Grouse** Mountain Plover Upland Sandpiper Long-billed Curlew Wilson's Phalarope Franklin's Gull Forster's Tern Black Tern Burrowing Owl Short-eared Owl Brewer's Sparrow Sage Sparrow Baird's Sparrow^b McCown's Longspur

Primary Habitat Type(s) Wetlands Wetlands Montane Riparian, Plains/Basin Riparian High Elevation Conifer, Mid Elevation Conifer, Aspen Plains/Basin Riparian Shrub-steppe, Shortgrass Prairie Specialized (cliffs) Shrub-steppe Mountain-foothills Shrub Shortgrass Prairie, Shrub-steppe **Shortgrass Prairie** Shortgrass Prairie, Meadows Wetlands Wetlands Wetlands Wetlands Shortgrass Prairie Shortgrass Prairie, Meadows Shrub-steppe, Mountain-foothills Shrub Shrub-steppe, Mountain-foothills Shrub **Shortgrass Prairie** Shortgrass Prairie, Shrub-steppe

^aSpecific management plans already exist for the Trumpeter Swan, Greater Sage-Grouse, and Bald Eagle in Wyoming. ^bSpecies is peripheral in Wyoming.

Table 2.

Level II (Monitoring). The action and focus for the species is monitoring (M). Declining population trends and habitat loss are not significant at this point. Includes species of which Wyoming has a high percentage of and responsibility for the breeding population (R), species whose stability (S) may be unknown (S?), species that are peripheral (P) for breeding in the habitat or state, or additional knowledge (K) may be needed.

Species

Common Loon American White Pelican Harlequin Duck Montane Merlin Low Elevation Snowy Plover^a Black-billed Cuckoo Yellow-billed Cuckoo Western Screech-Owl Eastern Screech-Owl Great Gray Owl Boreal Owl White-throated Swift Black-chinned Hummingbird^a Calliope Hummingbird

Rufous Hummingbird Lewis' Woodpecker Williamson's Sapsucker Red-naped Sapsucker Three-toed Woodpecker Black-backed Woodpecker Black-backed Woodpecker Olive-sided Flycatcher Willow Flycatcher Hammond's Flycatcher Gray Flycatcher Juniper Dusky Flycatcher

Cordilleran Flycatcher Ash-throated Flycatcher Cassin's Kingbird^a Loggerhead Shrike Plumbeous Vireo Western Scrub-Jay Juniper Titmouse Bushtit Juniper Pygmy Nuthatch Brown Creeper Marsh Wren

Primary Habitat Type(s)

Wetlands, Aquatic Aquatic Riparian Conifer Wetlands Plains/Basin Riparian Plains/Basin Riparian Plains/Basin Riparian Plains/Basin Riparian Mid Elevation Conifer, High Elevation Conifer **High Elevation Conifer** Specialized (cliffs and canyons) Plains/Basin Riparian, Shrub-steppe Mid Elevation Conifer, Montane Riparian Montane Riparian, Plains/Basin Riparian, Mid Elevation Conifer Mid Elevation Conifer Low Elevation Conifer, Plains/Basin Riparian Mid Elevation Conifer Aspen Mid Elevation Conifer, High Elevation Conifer Mid Elevation Conifer, High Elevation Conifer High Elevation Conifer, Mid Elevation Conifer Montane Riparian, Plains/Basin Riparian High Elevation Conifer, Aspen, Montane Riparian Woodland, Mountain-foothills Shrub Low Elevation Conifer, Aspen, Mountain-foothills Shrub Montane Riparian, Mid Elevation Conifer Juniper Woodland Juniper Woodland, Plains/Basin Riparian Shrub-steppe Mid Elevation Conifer, Low Elevation Conifer Juniper Woodland Juniper Woodland Woodland Low Elevation Conifer Mid Elevation Conifer, High Elevation Conifer Wetlands

Table 2. Continued

Species

American Dipper Golden-crowned Kinglet Western Bluebird Townsend's Solitaire

Sage Thrasher Townsend's Warbler MacGillivray's Warbler Wilson's Warbler Vesper Sparrow Lark Sparrow Lark Bunting **Grasshopper Sparrow** Chestnut-collared Dickcissel Bobolink Scott's Oriole

Primary Habitat Type(s)

Montane Riparian High Elevation Conifer Juniper Woodland, Low Elevation Conifer Mid Elevation Conifer, High Elevation Conifer, Juniper Woodland Shrub-steppe High Elevation Conifer, Mid Elevation Conifer Montane Riparian, Plains/Basin Riparian Montane Riparian Shrub-steppe Shrub-steppe Shortgrass Prairie, Shrub-steppe Shortgrass Prairie, Shrub-steppe Longspur Shortgrass Prairie Shortgrass Prairie Shortgrass Prairie, Agricultural Lands, Meadows Juniper Woodland

^aSpecies is peripheral in Wyoming.
Table 3.

Level III (Local Interest). Species that Wyoming Partners in Flight may recommend for conservation action (CA) that are not otherwise high priority but are of local interest (LI). Can include monitoring (M).

Species Primary	Habitat Type(s)
Western Grebe	Wetlands, Aquatic
Clark's Grebe	Wetlands, Aquatic
Northern Harrier	Wetlands, Meadows
Golden Eagle	Specialized (cliffs)
Prairie Falcon	Specialized (cliffs)
White-tailed Ptarmigan ^a	Alpine Tundra/Grassland
Blue Grouse ^a	Mid Elevation Conifer, High Elevation Conifer
American Avocet	Wetlands
Willet	Wetlands
Common Poorwill	
	Mountain-foothills Shrub, Shrub-steppe
Red-headed Woodpecker	Plains/Basin Riparian, Low Elevation Conifer
Say's Phoebe	Shrub-steppe
Clark's Nutcracker	High Elevation Conifer, Mid Elevation Conifer
Northern Rough-winged Swallow	Plains/Basin Riparian
Rock Wren	Specialized (rock outcrops)
Canyon Wren	Specialized (canyons)
Bewick's Wren	Juniper Woodland
Veery Montane	Riparian
Virginia's Warbler	Juniper Woodland, Mountain-foothills Shrub
Black-throated Gray Warbler	Juniper Woodland, Mountain-foothills Shrub
Ovenbird	Plains/Basin Riparian
Lazuli Bunting	Montane Riparian, Plains/Basin Riparian, Mountain-
Foothills Shrub	
Bullock's Oriole	Montane Riparian, Plains/Basin Riparian
Black Rosy-Finch	Alpine Tundra/Grassland, Specialized (cliffs)
Brown-capped Rosy-Finch	Alpine Tundra/Grassland, Specialized (cliffs)
· · · ·	

^aClassified as a game species in Wyoming.

Table 4.

Level IV (Not Considered Priority). Additional species of concern, but not considered a priority species; species is known to be stable (S) or increasing, or is addressed elsewhere in other management plans; no action is needed; monitoring (M) is not precluded but is not the focus; or species is extirpated (E) and no action is needed.

Species

Wood Duck^a Cinnamon Teal^a **Canvasback**^a Redhead^a **Ring-necked Duck**^a Bufflehead^a Barrow's Goldeneve ^a Hooded Merganser^a Northern Bobwhite^b Sandhill Crane^a California Gull Chimney Swift Warbling Vireo Pinyon Jay Juniper Black-billed Magpie Mountain Chickadee Mountain Bluebird Western Tanager Green-tailed Towhee Clay-colored Sparrow **Rose-breasted Grosbeak** Black-headed Grosbeak Cassin's Finch

Primary Habitat Type(s)

Plains/Basin Riparian Wetlands Wetlands Wetlands Wetlands Wetlands Wetlands Aquatic Plains/Basin Riparian Wetlands Aquatic Urban Plains/Basin Riparian, Mid Elevation Conifer, Aspen Woodland Generalist High Elevation Conifer, Mid Elevation Conifer Mountain-foothills Shrub, Shrub-steppe Mid Elevation Conifer, High Elevation Conifer Mountain-foothills Shrub, Shrub-steppe Mountain-foothills Shrub, Shrub-steppe Plains/Basin Riparian, Montane Riparian Mid Elevation Conifer, Aspen Mid Elevation Conifer, High Elevation Conifer

^aSpecific management plans already exist for waterfowl and the Rocky Mountain Greater Sandhill Crane.

^bClassified as a game species in Wyoming

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Table 5: Fish and Wildlife Service's Wyoming Ecological Services Field Office's Recommended Spatial and Seasonal Buffers for Breeding Raptors

Raptors of Conservation Concern (see below for more information)

Common Name	Spatial buffer (miles)	Seasonal buffer
Golden Eagle	0.5	January 15 - July 31
Ferruginous Hawk	1	March 15 - July 31
Swainson's Hawk	0.25	April 1 - August 31
Bald Eagle ^a	see instructions below ^a	
Prairie Falcon	0.5	March 1 - August 15
Peregrine Falcon	0.5	March 1 - August 15
Short-eared Owl	0.25	March15- August 1
Burrowing Owl	0.25	April 1 – September 15
Northern Goshawk	0.5	April 1 - August 15

Additional Wyoming Raptors

Common Name	Spatial buffer (miles)	Seasonal buffer
Common Name Osprey Cooper's Hawk Sharp-shinned Hawk Red-tailed Hawk Rough-legged Hawk Northern Harrier Merlin American Kestrel Common Barn Owl Northern Saw-whet Owl Boreal Owl Long-eared Owl Great Horned Owl Northern Pygmy-Owl Eastern Screech -owl Western Screech-owl	0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.125 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.125 0.125 0.125 0.125 0.125 0.125 0.125 0.125 0.125 0.125 0.125 0.125	April 1 - August 31 March 15 – August 31 March 15 – August 31 February 1 – August 31 February 1 – August 15 (winter resident only) April 1 - August 15 April 1 – August 15 February 1 – September 15 March 1 - August 31 February 1 – July 31 February 1 – July 31 February 1 – August 15 December 1 – September 31 April 1 – August 1 March 1 – August 15 March 1 – August 15
Great Gray Owl	0.25	March 15 – August 31

^aBald Eagles: When the proposed infrastructure and facilities do not pose an increased risk of direct mortality, we recommend using the following general guidelines for work within Wyoming in order to avoid disturbing eagles and adequately protecting their habitat:

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- 1. Conduct surveys within 0.5 mile of proposed activity for eagle nests and/or roosts during the appropriate time of year. Contact the Service's Ecological Services Wyoming Field Office if your project will occur within 0.5 mile of a known nest or roost to determine the potential impact of your activity to nesting and/or roosting bald eagles.
- 2. Avoid project-related disturbance and habitat alteration within 0.5-mile of bald eagle nests from the period of early courtship to post-fledging of chicks (January 1 through August 15).
- 3. Avoid disturbance within 0.5 mile of communal winter roosts from November 1 to April 1.
- 4. Avoid construction of above-ground structures within 0.5-mile of bald eagle nest sites and communal winter roost sites. Below ground structures (e.g., pipelines, buried power lines, fiber optic lines) may be sited closer as long as construction occurs outside of the active nesting or roosting season and will not result in the loss of alternate nest sites or roost trees.

A protective buffer for foraging areas (i.e., a linear length of river) will also be needed if the proposed activity may preclude use of foraging areas (e.g., extensive human activities on or near the water).

In Wyoming, the nesting season occurs from February 1 to August 15 and bald eagle nest buffers should receive full implementation during this time period. For some activities (construction, seismic exploration, blasting, and timber harvest), a larger buffer around the nest may be necessary.

Sensitivity to disturbance by roosting and nesting bald eagles may vary between individual eagles based on topography, density of vegetation, and intensity of activities. Modification of protective buffer recommendations may be considered where biologically supported and developed in coordination with the Service's Wyoming Ecological Services Field Office.

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APPENDIX E: SERVICE TERRITORY MAPS

• Black Hills Power / Wyodak Mine

- > Campbell County, Wyodak, WY Electric Distribution System and Wyodak Mine
- > Weston County, Upton, WY Electric Distribution System
- > Weston County, Osage, WY Electric Distribution System
- Weston County, New Castle, WY Electric Distribution System

• Cheyenne Light Fuel & Power Company

> Laramie County, Cheyenne, WY – Electric Distribution System

• Black Hills Energy Wyoming Gas Operations

> State-wide map of Midstream operations and Compression

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BLACK HILLS GENERATION, WYOMING



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Campbell County, Wyodak, WY, Electric Distribution System, and Wyodak Mine





Weston County, Upton, WY Distribution System



Weston County, Osage, WY Distribution System



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Weston County, New Castle, WY Distribution System



Black Hills Energy, Cheyenne WY



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Cheyenne WY, Distribution System



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APPENDIX F: AVIAN PROTECTION POLICY

BLACK HILLS CORPORATION COMPANY POLICY

	E-01-01-02
DATE EFFECTIVE	PAGE NO.
	Page 1 of 2
Department	ABPROVED
Environmental	But
Services	pr. Magi
Reviewed by	Reviewed Date
	Department Environmental Services

1. PURPOSE

The purpose of this Policy is to set forth Black Hills Corporation's policy on managing bird interactions with power lines and commitment to reducing detrimental effects of these interactions.

2. SCOPE

This Policy applies to Black Hills Corporation, its subsidiaries and affiliates that own or operate above ground power lines and appurtenances.

3. DEFINITIONS

- 3.1 Company: Black Hills Corporation, its subsidiaries and affiliates
- 3.2 <u>Avian Protection Plan (APP or the Plan)</u>: The programs in effect for each subsidiary of the Company to reduce the operational and avian risks that result from avian interactions with electric utility facilities.

4. POLICY

Bird interactions with power lines may cause bird injuries and mortalities, which, in turn, may result in violations of bird protection laws, outages, grass and forest fires, or raise concerns by employees, resource agencies and the public.

This Policy is intended to ensure compliance with legal requirements while improving distribution system reliability.

To fulfill this commitment, the Company will:

Implement and comply with each comprehensive Avian Protection Plan.

APPENDIX F: AVIAN PROTECTION POLICY

Policy Name:	PAGE	POLICY NO.
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- Ensure its actions comply with applicable laws, regulations, permits, and APP procedures.
- Document bird mortalities, problem poles and lines, and problem nests.
- Provide information, resources, and training to improve its employees' knowledge and awareness of the APP.
- Construct all new facilities to avian-safe standards.
- Retrofit or modify power poles where a protected bird has died or been injured. Modifications will be in accordance with APP procedures.
- Participate with public and private organizations in programs and research to reduce detrimental effects of bird interactions with power lines.

5. RESPONSIBILITIES

Company management and employees are responsible for managing bird interactions with power lines and are committed to reducing the detrimental effects of these interactions. Specific responsibilities include:

Avian Protection Program Coordinator: The Avian Protection Program Coordinator (APPC) or designee is responsible for developing and documenting Program Procedures and Practices, developing and implementing the Avian Protection Plan, communicating with regulatory agencies, and monitoring the implementation of the Plan.

Environmental Services: Environmental Services (ES) personnel assist operations to implement the Plan including monitoring, incident investigation, reporting, and mitigation design and operational changes needed to appropriately reduce the risk of negative interactions with protected avian species.

Electrical Transmission/Distribution: Transmission/Distribution will delegate personnel who are responsible managing all aspects of the Plan including monitoring, incident investigation, reporting, and mitigation design and operational changes needed to appropriately reduce the risk of negative interactions with protected avian species.

Power Generation, Mining, Exploration and Production (E&P)/Midstream:

Environmental support personnel are responsible for managing aspects of the Plan including monitoring, incident investigation, reporting, and mitigation design and operational changes needed to appropriately reduce the risk of negative interactions with protected avian species.

Electric Construction Standards Committees: The Company's electrical design standards committees (transmission, distribution) are responsible for the approval of electrical structure and electrical design modifications needed to meet Plan requirements.