



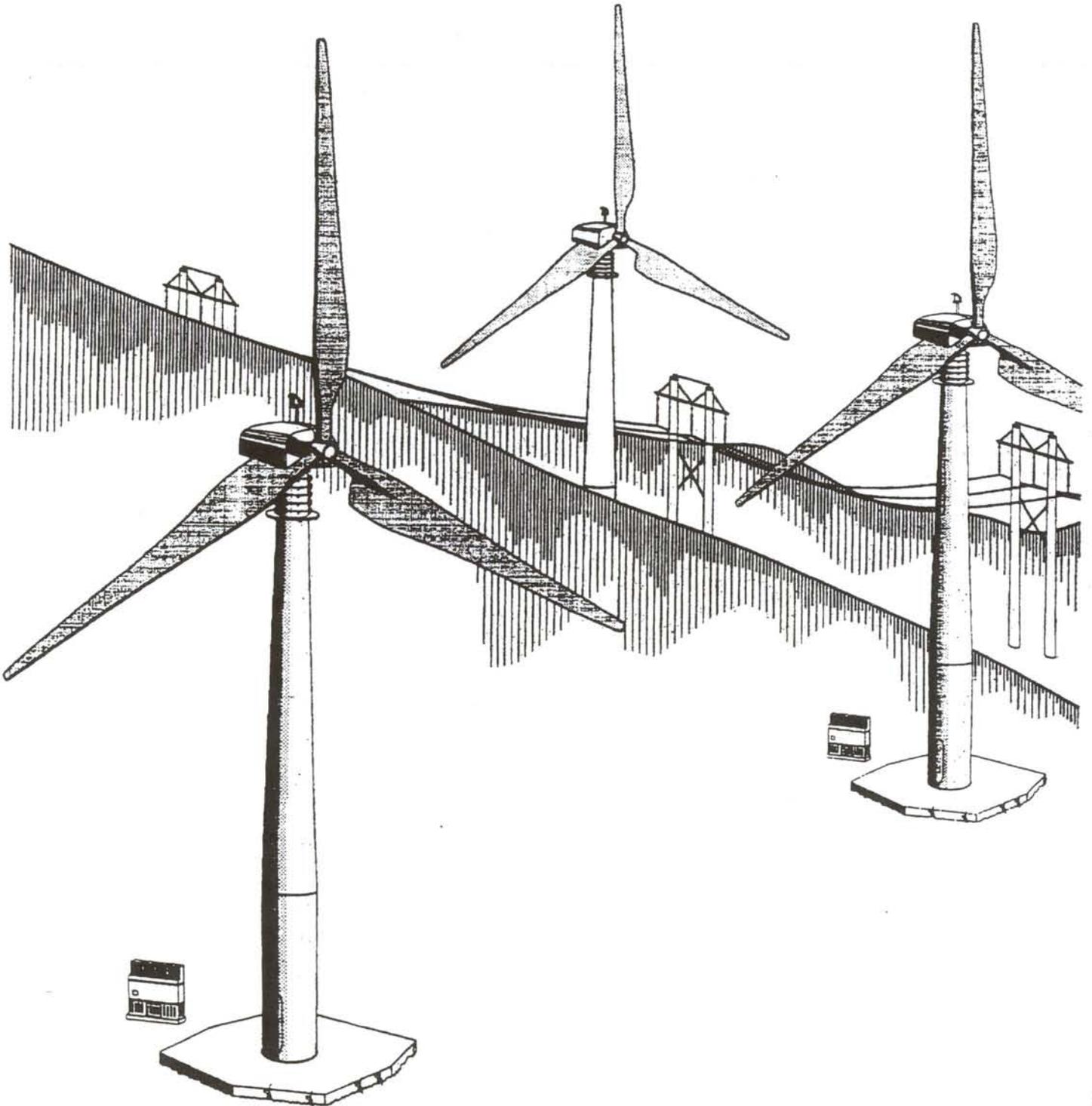
U.S. Department of the Interior
Bureau of Land Management

Rawlins District

July 1997



Record of Decision SeaWest/PacifiCorp Windpower Project



The Bureau of Land Management is responsible for the balanced management of the public lands and resources and their various values so that they are considered in a combination that will best serve the needs of the American people. Management is based upon the principles of multiple use and sustained yield; a combination of uses that take into account the long term needs of future generations for renewable and nonrenewable resources. These resources include recreation, range, timber, minerals, watershed, fish and wildlife, wilderness and natural, scenic, scientific and cultural values.

BLM/WY/PL-97/018+5101



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Wyoming State Office
P.O. Box 1828
Cheyenne, Wyoming 82003-1828

WYW-130382

SeaWest Energy Corporation

JUL 23 1997

Dear Reader:

The Record of Decision (ROD) for SeaWest/PacifiCorp Windpower Project is provided for your information and use. SeaWest Energy Corporation acquired development rights from KENETECH Windpower through bankruptcy court. The windpower project is located in east central Carbon County. The first phase will be constructed at Arlington, Wyoming. The ROD outlines the decision and rationale (including key management considerations) the Bureau of Land Management (BLM) used in reaching its decision to approve the project. The ROD also explains why BLM concluded it was unnecessary to supplement the EIS after SeaWest took over the project and the ROD identifies mitigation and monitoring requirements that will minimize environmental impacts.

Public Participation and key dates in the National Environmental Policy Act (NEPA) process are identified in the ROD. The Environmental Impact Statement (EIS) was prepared pursuant to NEPA and other regulations and statutes to address possible environmental impacts which could result from the project and to solicit public comments and concerns.

A copy of the ROD has been sent to affected government agencies and to those persons who responded to scoping, commented on the EIS, or otherwise indicated to BLM that they wished to receive a copy of the EIS. Copies of the ROD are available to the public at the following location:

Bureau of Land Management
Rawlins District Office
1300 Third Street
Rawlins, WY 82301

The ROD has been reviewed and concurred with by Robert Armstrong, Assistant Secretary of the Interior for Lands and Minerals. This decision is the final decision of the Secretary of Interior on the SeaWest/PacifiCorp Windpower Project.

BLM would like to thank the individuals and organizations who provided suggestions and comments on the Draft and Final EIS. Your help has been invaluable in preparing the EIS and the enclosed ROD. Questions regarding this ROD should be directed to Walter George, Project Leader, Rawlins District Office, 1300 Third St., Rawlins, WY 82301, (307) 328-4363 or e-mail: wywgeorge@wy.blm.gov.

Sincerely,

Alan L. Kesterke
Associate State Director

RECORD OF DECISION

SEAWEST/PacifiCorp Windpower Project

WYW-130382,
WYW-130929,
and
WYW-136588

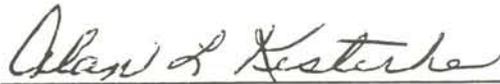
Prepared by: Great Divide Resource Area,
Rawlins District Office
Rawlins Wyoming

RECOMMENDATION AND APPROVAL

I have reviewed the Draft and Final Environmental Impact Statements and supportive documentation prepared in accordance with regulations and guidelines of the National Environmental Policy Act of 1969 (42 U.S.C. 4371 et seq., 40 CFR 1500).

I have also reviewed the rationale, criteria, terms and conditions that are presented in the Record of Decision. The decision has been prepared in accordance with applicable provisions and regulations for the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1700 et seq., 43 CFR 2800) and is consistent with decisions made in the Great Divide Resource Management Plan. The decision for this project is consistent with State and Local land use plans.

I recommend the decision and appendant Terms and Conditions be approved.



JUL 15 1997

Alan Kesterke, Associate State Director

I concur:



JUL 17 1997

Bob Armstrong, Assistant Secretary of Interior

TABLE OF CONTENTS

BACKGROUND AND PROJECT HISTORY	1
DECISION	3
ALTERNATIVES INCLUDING THE PROPOSED ACTION	6
MANAGEMENT CONSIDERATIONS	8
MITIGATION AND MONITORING	12
FINAL EIS COMMENTS AND RESPONSES	14
• American Wind Energy Association	15
• Frank and Lois Layton	19
• New York Department of Environmental Conservation	21
• Biodiversity Associates/Friends of the Bow	25
• Richard J. Guenzel	36
• Wyoming Game and Fish Department	38
LEGAL DESCRIPTIONS FOR WIND FARM, 230 kV POWER LINE, AND POWER LINE ACCESS ROADS	54
APPENDIX 1	
APPENDIX 2	
APPENDIX 3	

RECORD OF DECISION - SEAWEST/PacifiCorp Windpower Project

A. BACKGROUND AND PROJECT HISTORY

On September 13, 1993, US Windpower submitted a right-of-way application to the Rawlins District Office of the Bureau of Land Management (BLM or Bureau) to use Public Land in eastern Carbon County for wind energy development. The proposed project would be constructed in phases over a 10 -12 year period using wind turbines manufactured by US Windpower. BLM formed an interdisciplinary team, selected a third-party consultant to prepare the National Environmental Policy Act (NEPA) analysis, and conducted internal scoping. US Windpower changed its name to KENETECH Windpower (KENETECH) January 1, 1994.

A Scoping Statement was mailed to interested parties on January 10, 1994. A Notice of Intent to Prepare an EIS was published in the Federal Register on the same day (59 FR 6, page 1404). Public Scoping meetings were held in Rawlins and Laramie, Wyoming, on February 2-3, 1994. The 45-day scoping period closed on February 25, 1994.

The DEIS was released on January 13, 1995. The Environmental Protection Agency (EPA) published the Notice of Availability in the Federal Register on January 27, 1995 (60 FR 18, page 5388). Public meetings were held in Rawlins and Laramie, Wyoming, on February 8-9, 1995, respectively. The 60-day comment period closed on March 28, 1995.

The FEIS was released on August 18, 1995. The EPA published the Notice of Availability in the Federal Register on September 1, 1995 (60 FR 170, page 45717). The 30-day comment period closed on October 2, 1995.

In November 1995, BLM learned of operational problems with the KENETECH turbine and financial problems in the company. Information was requested and KENETECH responded with a series of letters in early 1996. Due to lack of funds, KENETECH suspended wildlife field studies on March 15, 1996. In May 1996, KENETECH filed for Chapter 11 bankruptcy. BLM suspended work on the Right-of-Way application.

In January 1997, SeaWest Energy Corporation (SeaWest) purchased development rights to the project from the bankruptcy court. SeaWest submitted a proposed project plan to BLM later that same month. BLM requested the third-party consultant prepare a "Comparison Report" between the two proposals that would: (1) help BLM determine if substantial changes to the Proposed Action had been made, or if there were significant new circumstances or information relevant to environmental concerns bearing on the Proposed Action or its impacts [40 CFR 1502.9(c)] that would require supplementation of the Environmental Impact Statement (EIS), (2) review literature on wind energy impacts published since preparation of the Draft EIS (DEIS) in early 1995, and (3) consider field data collected in 1995 and not included in the Draft or Final EIS. The Comparison Report was completed in June 1997.

The Comparison Report examined twenty-eight attributes of the wind farm, sixteen attributes of the wind farm electrical system, six attributes of the wind farm communication system, and five attributes of access to the wind farm. Because a final turbine selection had not been made when the report was prepared, a range of values was examined for the SeaWest proposal. Twenty-eight of the total fifty-five attributes showed no change from the KENETECH to SeaWest proposal. Thirteen of the attributes varied, but not appreciably. Fourteen of the attributes did vary to some extent and are discussed below.

Many of the attributes are interrelated and we will discuss the fourteen that varied in seven groups.

Number of turbines, strings and end row turbines: Gross numbers of these attributes all decreased between 33 - 50%. This change in the SeaWest proposal is viewed as a beneficial

RECORD OF DECISION - SEAWEST/PacifiCorp Windpower Project

change because fewer turbines will pose a lower risk to bird collisions, will be less visible, and require less surface disturbance. End row turbines have been suggested as locations of greater risk for bird collisions. Reducing the number of end row turbines will further reduce the risk of bird collisions. The benefits of this attribute group is offset by changes in the next two groups.

Tower height, distance between towers and strings: Increased distance between towers and strings will make the first phase appear less dense and may make it easier for big game animals to habituate to the wind farm. Greater spacing may actually be a disadvantage to reducing bird strikes because at a lower density, the bird may not recognize the strings as a barrier to be avoided. Taller towers will put the rotor swept area into the space used by higher flying raptors.

Rotor diameter, individual and total rotor swept area: The rotor diameter and subsequently the individual rotor swept area will be 45 - 78% greater for each turbine in the SeaWest proposal. Thus each individual turbine may pose greater risk of collision than the KENETECH turbine. This increased risk is offset by a 2 - 20% reduction in the total rotor swept area for all of Phase I, and a 33 - 50% reduction in the number of turbines.

Blade tip speed: This attribute has been associated with increased bird mortality. The SeaWest proposal would use turbines that, on the average, has 10 - 19% slower blade tip speeds that the KENETECH proposal.

Number of meteorological towers: Meteorological (met.) towers are supported by guy wires and these thin wires may pose a risk to bird collisions. The SeaWest proposal would use 11 - 16 met. towers while the KENETECH proposal had only planned to use 7. Bird collisions with guyed towers have been usually documented with isolated radio towers. The increased number of guyed met. towers may pose a slightly increased risk of collision.

Number of in plant power poles and above-ground power lines: The KENETECH proposal had 150 above-ground power poles and five miles of 34.5 kV power line. The SeaWest proposal will have all power and communication lines buried and only two riser poles at the substation. This attribute change should reduce the risk to large birds by eliminating potential perches around turbines.

Turbine layout characteristics: High use raptor areas were tentatively identified during 1994/95 use observations. These areas included Arlington Hill (at the extreme south end of Foote Creek Rim) and the entire west (leading) edge of Foote Creek Rim. Use observations in 1995/96 further refined use along the west edge of the rim. Eighty percent of large bird use occurs within a 100m band, centered on the west edge of the rim. The SeaWest proposal does not plan any turbines on Arlington Hill and reduced by 64 - 83% the number of turbines within 50m of the west rim edge.

A complete discussion of attribute changes relative to avifauna is in section 3.2.3.3 of the Comparison Report.

Additional data collected at the site in 1995/96, and not included in the EIS, did add to our understanding of wildlife use at the site. However, the additional data did not measurably enhance our understanding of either wildlife population dynamics or prospective risks to animals. The additional information still does not provide a sufficient data base to discern variations due to natural environmental factors such as weather, prey base, other mortality factors, etc. and effects of the wind farm. Furthermore, the data collection design is keyed to a before/after comparison with undisturbed reference areas considered. Until the wind farm is built and operating, comparisons and conclusions would be premature.

RECORD OF DECISION - SEAWEST/PacifiCorp Windpower Project

Studies at other wind farms have narrowed somewhat the factors that may contribute to bird mortality in wind farms but there are still no conclusions which are reliably applicable to the proposed project. The number of factors still under consideration prevents specific, definitive recommendations. SeaWest has included mortality reducing modifications in their proposal they believe are reasonable and prudent given the current level of knowledge on this matter.

B. DECISION

The Bureau of Land Management has reviewed the Comparison Report of the KENETECH and SeaWest proposals. While there are differences between many attributes or components of the wind farm and its other systems, we conclude that the positive and beneficial changes outweigh the negative, and that overall the changes are not discernibly different from and will not affect the human environment in a significant manner or to a significant extent not already considered and analyzed in the draft and final EIS's. Furthermore, we conclude there are no new circumstances or information presenting significant environmental concerns which have become available that would substantially alter the conclusions of the analysis in the draft and final EIS's. Therefore, a supplemental EIS will not be required under NEPA and the regulations at 40 CFR 1502.9(c).

The Bureau of Land Management will offer and will grant three renewable Right-of-Way (ROW) Grants under authority of Title V of the Federal Land Policy and Management Act of 1976, 43 U.S.C. 1761-1771. A right-of-way grant (WYW-130382) will be issued to SeaWest Energy Land Associates, LLC (a limited liability Delaware Corporation formed by SeaWest Energy Corporation to hold and administer the wind energy land rights in Wyoming) for construction of a 500 MW wind-electric plant. This grant is described in the EIS as the proposed action. Another ROW grant will be issued to PacifiCorp (WYW-130929) to construct a 230 kV power line. The grant for the 230 kV power line will follow the route described as alternative three in the EIS. A third ROW Grant (WYW-136588) will be issued to PP&L for the temporary use of access roads across Public Land during power line construction. Upon approval of the Record of Decision (ROD), BLM intends to issue all three ROW grants.

Legal descriptions of the affected Public Lands are attached to this decision. The grant for the wind farm will include the entire area requested by SeaWest. The decision to grant a ROW for this area does not imply or give SeaWest the right to construct wind energy facilities at any time or on any Public Land identified in the Grant. Approvals to construct specific phases will be authorized via Notices to Proceed (NTP) after appropriate NEPA analysis has been conducted.

Rationale: This decision is based on the following factors. These factors are discussed in Section D, Management Considerations.

1. The project will supply non-polluting electric energy for which a long-term need has been identified, will allow utilities in the Rocky Mountain Region to test the integration of this type of electric generating facility with existing facilities, will provide large and significant income and tax benefits to Carbon County and south central Wyoming, and will support the national energy policy of developing renewable energy resources.
2. Public Lands comprise only 16,973 acres (28%) of the total project area of 60,619 acres. Public Lands lie in a "checkerboard" pattern where no one section (1 square mile) is contiguous to another except at the corners. There are portions of the project area (e.g. northern Foote Creek Rim, north eastern corner of the Simpson Ridge area) where no Public Lands are present. All private landowners within the project area have granted development rights to SeaWest.

RECORD OF DECISION - SEAWEST/PacifiCorp Windpower Project

3. The project has received permits from the Wyoming Industrial Siting Council, the Wyoming State Land Commission, the Wyoming Public Service Commission, and the Carbon County Planning Commission. The project is supported by local government entities in Carbon County and the Governor of Wyoming.
4. The SeaWest project will significantly change the visual appearance and alter the recreational experience of public land users of the project area, will result in an indeterminate number of avian deaths, may affect nesting activity of the mountain plover and sage grouse, has the potential to displace big game herds from the project area, and may conflict with potential coal mining activities in a portion of the project area.

Insufficient information is available to accurately determine the number of collision-related avian mortalities that will occur, or to determine the effect these deaths may have on bird populations. Estimates indicate significant mortality levels will not occur.

A non-jeopardy opinion on endangered species (bald eagle and peregrine falcon) has been issued by the U.S. Fish and Wildlife Service. The Service has also issued a Special Purpose Permit under authority of the Migratory Bird Treaty Act (16 U.S.C. 703-712) for the authorized take of migratory birds up to the limits specified in the permit. A Letter of Authorization, attached to the permit, provides instructions and guidance on take of Golden Eagles, which are protected by the Eagle Act (16 U.S.C. 668). A copy of these documents is attached to this decision.

In consideration of the uncertain nature of the impacts, BLM will require extensive monitoring of wind farm operations. A technical advisory committee will assist BLM in addressing unexpected impacts at the facilities. Similar circumstances exist regarding insufficient impact information to big game species.

5. Implementation of mitigation measures identified in Section E of this decision, the use of monitoring studies, and the technical advisory committee lead BLM to conclude potential impacts from Phase I of this project do not preclude its approval. BLM will closely monitor project effects and take appropriate action if unexpected impacts are detected.
6. Potential impacts to cultural resources and Native American sacred places have been mitigated and procedures identified to address future conflicts. A copy of the MOU, addressing these issues, prepared pursuant to the Historic Preservation Act of 1966 (16 U.S.C. 470) and the American Indian Religious Freedom Act is attached.

This decision will be conditioned by the following Terms and Conditions:

1. The initial term of grants WYW-130382 and WYW-136292 will be 36 years. The term is set to coincide with the term of a Wyoming State Land Board grant of easement for State Lands in the project area. Grant WYW-136588 will be issued for two years.
2. All grants will be issued subject to specifications and requirements identified in BLM approved Plans of Development (PODs). The PacifiCorp POD, dated August 17, 1995, was approved on June 27, 1997. The Draft SeaWest POD, dated April 1997, was conditionally approved on May 30, 1997. The PODs will be made a part of the Terms and Conditions of the respective Grants.
3. Any POD must contain all of the mitigating measures identified in the final EIS.

RECORD OF DECISION - SEAWEST/PacifiCorp Windpower Project

4. Construction for each Grant may not commence until the BLM Authorized Officer issues a Notice to Proceed (NTP). A NTP will only be issued after an acceptable POD has been developed and approved by BLM.
5. The wind farm will be constructed in phases, and BLM will only issue a NTP for Phase I at this time. Subsequent phases may be authorized following submittal of a POD and conclusion of NEPA analysis (including full public review) for each phase. RODs will be issued for each additional phase.
6. Other subsequent uses on the Public Lands covered by Grant WYW-130382 must recognize SeaWest's prior right and give consideration to any effect their proposal may have on SeaWest's planned or constructed facilities.
7. Federal coal resources underlie a portion of the Simpson Ridge Project Area. To prevent federal coal resources from being devalued by surface improvements, the grant holder may place wind energy facilities on the Public Lands identified below, but bears the responsibility for repair, replacement, or lost revenue should the BLM subsequently lease federal coal and the mining of such coal damage or impair the operation of wind energy facilities. The lands subject to this condition are:

T. 21 N., R. 80 W.
Section 12: ALL
Section 14: ALL

T. 22 N., R. 80 W.
Section 22: NE $\frac{1}{4}$, S $\frac{1}{2}$
Section 26: N $\frac{1}{2}$ NW $\frac{1}{4}$, SW $\frac{1}{4}$ NW $\frac{1}{4}$
Section 34: ALL
8. All requirements identified in the **Biological Opinion**, dated June 30, 1997, and **Special Purpose Permit**, dated March 21, 1997, prepared by the U.S. Fish and Wildlife Service (USFWS) for this project shall be incorporated into the Terms and Conditions of the ROW Grants.
9. Provisions of the **Memorandum of Agreement**, accepted by BLM on June 30, 1997, concerning protection of resources eligible for the National Register of Historic Places shall be followed in the approval and management of this project on Public Lands.
10. Specific modifications and **mitigation** to the proposed action are identified in Section E of this decision. These measures are incorporated into the approved ROD.
11. **Bonding** will be required to ensure proper maintenance and reclamation. A bond, of appropriate surety, in the amount of \$2,000 per turbine located on Public Land, shall be obtained prior to issuance of the NTP for each phase.
12. **Rental** has been determined in conformance with the Uniform Standards of Professional Appraisal Practice. The fair market rent for WYW-130382 has three components:
 - a. An **Initial Payment**, or Option Payment, shall be made for the entire grant area. Payment for the first five years shall be \$12,000 per year. Payment during the second five-year period shall be \$24,000 per year. The Initial Payment requirement

RECORD OF DECISION - SEAWEST/PacifiCorp Windpower Project

shall cease upon payment of the first half of the Installation Fee. Should the holder relinquish portions of the ROW grant, creating a situation where no wind turbines are present on Public Lands in the revised grant, the initial payment requirement shall be restored. Initial payment time period shall continue regardless of Initial Payment status.

- b. A one-time **Installation Fee** shall be paid upon construction of each project phase. The amount shall be equal to \$101.01 times the term (in years) of the grant per megawatt (rounded up to the next whole megawatt) of rated power on Public Land. For example, if 16.3 megawatts are installed on Public Land, and the term of the grant is 34 years, the Installation Fee would be: $\$3,636.36 \times 17 \text{ MW} = \$61,818.12$. Fifty percent (50%) of the Installation Fee shall be paid upon commencement of construction of a phase and 50% at the time such phase begins commercial operation.
- c. The final component of the fair market rent is an **Annual Rent** equal to \$1,000 per calendar year for each megawatt (rounded up to the next whole megawatt) of installed capacity on Public Land. The Annual Rent shall be tied to a Consumer Price Index (CPI). The "Index" is the "*Consumer Price Index - All Urban Consumers, U.S. City Average, All Items (1982-84 Base = 100)*", published by the U.S. Department of Labor, Bureau of Labor Statistics. The Annual Rent amount shall be adjusted annually on this CPI. The Annual Rent commences if and when a wind turbine is installed in the grant area and continues for so long as each wind turbine remains in the grant area until its physical removal.

The **first payment** of the Initial Payment and/or Annual Rent shall be prorated for any partial year and added to the first complete year payment as the first annual payment. Subsequent annual payments will be due on January 1 for that year's payment.

Minimum Fee: In no event shall the total of all payments under this Grant during any calendar year be less than \$12,000 (prorated for partial years) during the term of this Grant.

Rental for the PacifiCorp power line and access roads (WYW-130929 and WYW-136588) will be determined under the provisions of 43 CFR 2803.1-2.

The **Bonneville Power Administration**, a cooperating agency for the EIS, will issue a separate ROD for their action to execute a power purchase agreement with PacifiCorp.

The "No action" alternative is considered the environmentally preferred alternative because it would not pose the risk of avian mortalities or permit surface disturbing activities.

C. ALTERNATIVES INCLUDING THE PROPOSED ACTION

BLM analyzed two alternatives in addition to the **proposed action**. The proposed action involves the construction and operation of a 500 MW wind farm at two Carbon County locations in south central Wyoming. The two project areas encompass 60,619 acres of Federal (16,973 ac), private (37,584 ac), and state (6,062 ac) lands. The Foote Creek Rim area is located at the Arlington interchange on Interstate Highway 80 and extends approximately seven miles north. This area varies from 0.5 to 2 miles wide and covers approximately 5,000 acres (68% private, 19% Federal, and 13% state). The Simpson Ridge project area is approximately 55,619 acres (61% private, 29%

RECORD OF DECISION - SEAWEST/PacifiCorp Windpower Project

Federal, and 10% state), lying within portions of Twps. 20-22 N., Rgs. 80-81 W. between Hanna and Elk Mountain, Wyoming.

Proposed wind farm facilities consist of 500 - 750 kW wind turbine generators supported by 131-151 ft. tubular towers spaced approximately 260-290 ft. apart within rows and approximately 1,150-1,350 ft. between rows. Associated facilities include: access roads, buried electric and communication lines, and padmounted transformers. An electrical substation and a 29-mile 230 kV power line from Foote Creek Rim to Hanna are common to all alternatives, except for the no action alternative.

Alternative A involves construction of a 300 MW wind farm, utilizing both the Foote Creek Rim and Simpson Ridge Project areas. A 40% reduction in the number of wind farm facilities is anticipated under Alternative A. Phased construction over a 10-12 year period is considered for both the proposed action and Alternative A.

The **no action alternative** (denial of ROW Grant - wind farm not constructed) was also analyzed.

Four other alternatives were considered but not analyzed in detail. They are:

1. Expand or Reduce the Project Area Size. Expanding the project area to avoid environmental conflicts was not considered necessary as the project boundaries were sized initially to allow for such consideration during the environmental analysis. The project area is sufficiently large to allow shifting of turbine placement to avoid or reduce impacts to certain resources. This alternative would not result in any measurable difference from the Proposed Action or Alternative A. Decreasing the project area while maintaining the capacity size may unnecessarily restrict consideration of potential turbine locations to areas that have environmental conflicts and, is thus, not a reasonable alternative.
2. Construct the Project in One Phase. This alternative was rejected because it is economically unrealistic to expect the applicant to erect wind turbines when electric supply contracts do not exist. Furthermore, authorization to construct the entire 500 MW facility, considering the unknown and uncertain impacts to avian species, would not allow BLM to incrementally monitor facility impacts and incorporate improved mitigation measures into subsequent phases.
3. Alternative Energy Sources. Consideration of generating electricity from alternative energy sources, such as coal, oil, gas, solar, or hydropower, is outside the scope of this analysis because the proposed action is to evaluate and produce a wind energy source in Wyoming.
4. Alternate Project Locations. Significant comments were received requesting BLM to analyze alternate sites for the proposed facility. BLM did not require other sites to be analyzed in the EIS for the following reasons:
 - a. Other project locations were economically infeasible. KENETECH supplied baseline data demonstrating the superior wind characteristics of the Foote Creek Rim and Simpson Ridge sites (see Tables 2.9 and 8.2, FEIS). An independent analysis, conducted by Dr. John Marwitz of the University of Wyoming, Department of Atmospheric Science, also supported this conclusion (see Appendix I, FEIS). The Wyoming Public Service Commission requires electric utility companies to utilize least-cost planning for electricity acquisition (Energy Policy Act of 1992). Development at other sites with less suitable winds would result in higher kilowatt

RECORD OF DECISION - SEAWEST/PacifiCorp Windpower Project

hour costs and the project would not be economically feasible. The SeaWest project is under similar economic constraints.

- b. Selection of an inferior wind site would not allow adequate evaluation of the viability of a Wyoming-based, wind-generated electricity source and its usefulness in the present utility grid.
- c. Evaluation of alternative sites would require extensive site-specific data collection. The cost to collect this additional data, compared to the total project cost, was deemed unreasonable when compared to extant environmental data and known potential impacts. Section 8.2.1 of the FEIS provides a detailed discussion of this issue.

D. MANAGEMENT CONSIDERATIONS

Issues of concern are identified on page viii of the FEIS. BLM has determined all issues, except those discussed below, to have been resolved and mitigated, as far as practicable, by the application of design and location criteria and the mitigation measures identified in the following section.

Major comments were received during the public comment period on the following issues: (1) wind energy facility impacts to wildlife, specifically direct mortality to birds; (2) compliance with wildlife protection laws, specifically the Endangered Species Act, Bald Eagle Protection Act and Migratory Bird Treaty Act; (3) displacement effects on big game species and sage grouse; (4) adequacy of data for BLM to make a decision about the project; (5) adequacy of mitigation measures to minimize or eliminate impacts; (6) adequacy of cumulative impact analysis; (7) conflict between wind energy development and coal resources in the southeast corner of the Simpson Ridge area; and (8) effects of wind energy facilities on recreational use of the project area.

Other issues BLM considered in the overall decision-making process include: (1) employment and revenues generated by the project, (2) national energy policy, (3) land ownership patterns, and (4) local and state government support. These factors are discussed below.

1. Avian effects A key environmental effect of wind energy facilities is bird collisions with turbine blades. Data on collision-related mortality is limited to short term studies, primarily from Altamont Pass, California. BLM recognizes that some avian mortality will occur in the wind farm. Facility components that may attract raptors, have been modified or eliminated to reduce perching opportunities (i.e., using solid tubular towers and no above-ground power lines).

Existing data suggest collision-related avian mortality will be low; however, these data are not conclusive. Monitoring studies (detailed in Appendix B of the DEIS) will be conducted in order to gain insight into the effect of wind farm operation on local bird populations. Monitoring studies will measure (1) raptor nesting activity and success within a ten-mile radius of Foote Creek Rim; (2) raptor use along Foote Creek Rim, Simpson Ridge and a reference area; and (3) wind farm-related mortality by carcass searches. Avian use and population measurements will be collected at two reference sites [Simpson Ridge (prior to wind energy development at this site) and a site in the Laramie Mountains] to determine changes not due to wind farm factors, including prey availability. Raptor species of interest include: the bald eagle, golden eagle, ferruginous hawk, red-tailed hawk, rough-legged hawk, Swainson's hawk, northern harrier, prairie falcon, peregrine falcon, American kestrel,

RECORD OF DECISION - SEAWEST/PacifiCorp Windpower Project

and turkey vulture. Use of project and reference areas by non-raptor avian species will also be monitored.

Surface disturbance (i.e., road construction and other clearing operations) may occur during periods when the mountain plover is nesting in the project area. This species may be listed as threatened or endangered under the Endangered Species Act. Restriction of vehicles and construction equipment to disturbed areas will minimize vehicle collisions with plovers and destruction of nests. The monitoring studies will include searches for plover nests in the spring and summer. Identified nests will be marked and avoided during the nesting period.

A technical advisory committee will review wildlife/project-related matters. The committee, composed of representatives from Wyoming Game and Fish Department, USFWS, and BLM will review monitoring data and methods, evaluate data from other wind farms, and make recommendations for wind farm modifications and design alternatives for Phase I and future phases. SeaWest, project owners, and the public, will be given an opportunity to provide input to the committee.

Potential mortality associated with power lines (i.e., electrocution, collision) will be minimized by following standard design practices in "*Suggested Practices for Raptor Protection on Power Lines - The State of the Art in 1981*" and "*Mitigating Bird Collisions With Power Lines: The State of the Art in 1994*" and any future revisions.

2. Enforcement of the Endangered Species Act, Bald Eagle Protection Act and Migratory Bird Treaty Act is the responsibility of the USFWS. BLM and SeaWest have coordinated closely with USFWS to ensure this project is in compliance with these laws. A non-jeopardy opinion and incidental take statement has been issued for endangered species. A Special Purpose Permit has been issued establishing compliance with the Migratory Bird Treaty Act. Instructions for handling Golden Eagles, in compliance with the Bald Eagle Protection Act, taken at wind farm facilities were attached to the permit. Avian mortality legal issues are discussed in Section 4.2.3.3 of the DEIS and Section 8.2.2 of the FEIS.
3. Wildlife displacement The displacement effect of wind energy facilities on big game species (i.e. antelope, mule deer and elk) and sage grouse is undetermined because no large-scale wind energy facility has been located in a wildland situation where these species occur. The monitoring study will include observations on these species' reaction to and use of habitats near the wind farm. The monitoring program is discussed in Appendix B of the DEIS and Section 8.2.3 of the FEIS.
4. Baseline data Some commentors contended BLM could not make an adequate or informed decision about this project because of inadequate baseline data. Baseline data for some resources are insufficient to precisely estimate impacts or to develop complete mitigation for impacts. Additional data was gathered for noise, snow deposition, visual quality, avian use, and raptor nesting. BLM follows the "rule of reason" in determining if additional data for a project analysis should be collected. Considering the variability of environmental factors that influence wildlife populations, collection of baseline data, for one to three years, will not provide, with any certainty, a complete picture of those populations. After considering the cost of collecting the data; BLM's minority landowner position; and the loss of potential income to adjacent private landowners, the county, the state, and the applicant; BLM determined that existing data are sufficient to make an informed and reasonable decision on the SeaWest project.

RECORD OF DECISION - SEAWEST/PacifiCorp Windpower Project

The unavailability of definitive baseline data does not violate NEPA [see, for example, *Scientists Institute for Public Information v. Atomic Energy Commission*, 481 F.2d 1079, 1092 (D.C. Cir. 1973); *Jicarilla Apache Tribe v. Morton*, 471 F.2d 1275, 1280-1281 (9th Cir. 1973)]. As the court said in *Jicarilla*, "If we were to impose a requirement that an impact statement can never be prepared until all relevant environmental effects were known, it is doubtful that any project could ever be initiated." NEPA also does not preclude agencies from pursuing projects because their environmental effects are speculative or unknown (*State of Alaska v. Andrus*, D.C. Cir. 1978, 580 F.2d 465, 473 *vacated in part on other grounds*, *Western Oil and Gas Ass'n v. Alaska*, 1978, 439 U.S. 922). Uncertainty is one of the factors considered during the decision making process.

5. Mitigation measures were described in Chapter 5 of the FEIS and are detailed in Section E. These measures are adequate to mitigate known and expected impacts. Following the comment period on the Draft and Final EIS's, BLM considered developing "if-then" operating criteria for the wind farm. For example, if a certain avian mortality level occurred, the wind farm operator would be required to install auditory warning devices or modify selected turbine operations. These requirements were not imposed because 1) BLM does not have enforcement authority over wind turbines on private or State lands and therefore could not uniformly apply this type of mitigation measure, 2) wildlife-related law enforcement is the responsibility of the U. S. Fish and Wildlife Service, and 3) our present understanding about causes of avian mortality in wind farms and limited field data from Foote Creek Rim preclude identifying realistic or accurate "if-then" operating criteria and mitigation measures. The phased approval process (with full additional NEPA analysis and public involvement for each phase), consideration of monitoring data, and input from the technical committee will ensure additional mitigation measures are identified and required when their need is demonstrated and their effectiveness proven. NEPA requires disclosure of all project-related impacts but does not require mitigation of all impacts [40 C.F.R. 1505.2(c)].
6. Cumulative impact analysis Some commentors felt that the cumulative impact analysis in the DEIS is inadequate. All known and reasonably foreseeable developments in the project areas have been evaluated. Sufficient data exists to determine that a severe or acute threat to any ecosystem component is not posed by this project or the resultant cumulative impacts. Implementation of the monitoring program provides a method to quickly detect any unexpected severe impacts. Cumulative impacts from actions proposed since the completion of the FEIS (e.g., Carbon Basin Coal Mine and Seminoe/Elk Mountain Land Exchange) will be addressed in the NEPA analysis prepared for those projects and NEPA analysis on subsequent wind energy phases. More detail on this issue is presented in Section 8.2.8 of the FEIS.
7. Coal resources A portions of the Simpson Ridge Wind Energy Area and the Carbon Basin Coal Area overlap each other. This area generally covers the eastern half of Townships 21 & 22 N., Range 80 W. A portion of this area was leased in 1982 and expired without development in 1992. There was no lease in effect when KENETECH applied for a ROW. In September 1996, Arch of Wyoming submitted a coal lease application for a surface mine located just to the southeast of the Simpson Ridge Area. The two areas overlapped only in T. 21 N., R. 80 W., Section 29, E½. Meetings with SeaWest and Arch of Wyoming disclosed no conflict with planned facilities in this section.

BLM is currently conducting land use planning for coal leasing. The planning decision is expected by the end of 1997. BLM will then prepare an EIS for the coal lease application. If approved, mining will begin in 2000 and last ten years. At the conclusion of mining,

RECORD OF DECISION - SEAWEST/PacifiCorp Windpower Project

further applications may be submitted. This mining may occur to the north of the current application area, into the overlap area, identified above.

BLM will not authorize any action which could devalue Federal coal resources. Term and Condition #7, (above) was developed to meet this objective. Because mining in the overlap area would not occur for at least 15 years, and placement of wind energy or coal mining facilities cannot be determined at this time, the provision will allow SeaWest to place wind energy facilities on Public Lands in the coal overlap area if they choose, but with the knowledge that BLM may lease this coal and SeaWest would bear all corrective costs resulting from coal mining.

Coal would probably be mined by underground methods. Adjustments to both mining methods and wind energy facility construction may minimize conflict between these two activities. BLM will work with SeaWest (or any subsequent wind energy operator) and the coal lease holder to resolve conflicts, when they are identified.

8. Recreational use and access All Public Lands will remain open where legal access now exists. Access to Public Lands that require crossing private lands will be subject to private landowner permission. Access in the Wick Wildlife Management Area, administered by Wyoming Game and Fish Department, will not be restricted. KENETECH acquired access to 640 acres of private land in compensation for use of 30 acres of private land easement located in T. 19 N., R. 79 W., Section 24.
9. Employment This project will not require large numbers of employees to operate and maintain the facility. Local infrastructures are adequate to accommodate anticipated construction employment as well as the long term operation and maintenance employment.
10. Revenue The project will generate substantial revenue for local economies and government. The Wyoming Industrial Siting Council estimates Phase I of the SeaWest project will provide approximately \$575,000 in impact assistance payments, \$2,300,000 in construction-related sales and use tax revenues, and \$2,000,000 in property taxes for the first three years of operation.
11. National Energy Policy This project is consistent with the National Energy Policy. This policy, established by President Bush in 1989 is designed to achieve a balance among the increasing need for energy at reasonable prices, the commitment to a safer, healthier environment, the determination to maintain an economy second to none, and the goal to reduce dependence by ourselves and our friends and allies on potentially unreliable energy suppliers. The National Energy Strategy document, prepared by the Department of Energy in 1992, identifies a goal of, "Reducing the cost of, and increasing the industry confidence in . . . wind . . . technologies to generate electric power."

As expressed in the Purpose and Need (FEIS, p. 1-1), this project will, "provide wind-generated electricity from a site in Wyoming and develop a further market for Wyoming-sourced wind-generated electricity." Experienced gained from the operation and performance of the first phase of this project will influence future decisions on the production and purchase of wind-generated electricity.

12. Land Ownership The amount, extent, and arraignment of Public Lands in the project area, the potential effect on private land values and income, and the position of State and Local

RECORD OF DECISION - SEAWEST/PacifiCorp Windpower Project

regulatory agencies toward this project have been considered in BLM's decision to approve the Right-of-Way Grant for this project.

13. Planning consistency and Other Permits The project is consistent with BLM, State and Local land-use plans. In addition to the Industrial Siting permit, the State of Wyoming Land Commission has issued an easement for all state lands within the project area. A Special Use Permit has been issued by Carbon County and the Public Service Commission of Wyoming has issued a Certificate of Public Convenience and Necessity. Wind energy projects are consistent with Federal policy to promote development of renewable energy resources.
14. Other Support This project was supported in public comments by the Governor of Wyoming, Carbon County, Carbon County School District No. 2, and The towns of Medicine Bow and Saratoga.

E. MITIGATION AND MONITORING

Twenty-two, project-wide, mitigation measures incorporated in the proposed action are identified on pages xi-xiv of the FEIS and discussed in Chapter 5 of the Draft and Final EIS. Notable measures adopted specifically for this project include: application of measures to all lands, regardless of ownership, subject to private landowner preference; design of wind farm facilities to prevent raptor perching (i.e., tubular towers and no in-Wind-farm above-ground power lines); placement of anti-perching devices on 230 kV power poles within 0.25 miles of sage grouse leks and within the Black-Footed Ferret Primary Management Zone; setback of wind farm facilities from sacred Native American sites per consultation with Native Americans; and painting of turbine blades and nacelles to increase visibility to birds. Monitoring studies are presented in Appendix B of the DEIS. All practicable methods to reduce environmental harm have been adopted.

The following measures are included in the ROW Grant (WYW-130382):

1. Construction of wind turbines and associated facilities for Phase I shall not commence until the Authorized Officer issues a NTP. The NTP shall identify the Public Lands to which Phase I activities shall be restricted. Construction of wind energy facilities on other Public Lands included in this Grant, not authorized by the Phase I NTP, is not allowed until adequate environmental review has occurred and a subsequent NTP is issued.
2. The Authorized Officer shall be notified before any changes, modifications, or replacement of turbines, turbine blades or other wind farm facilities are made. Normal operation and maintenance activities, such as in-kind replacement of turbine blades or other components, are not included in this requirement.
3. Turbines that are damaged or inoperative shall be promptly repaired. No turbine shall be inoperative for more than 90 continuous days. The Authorized Officer may request removal of turbines that are inoperative for more than 90 continuous days. The Holder may request an exception to this requirement. The Authorized Officer may request written documentation before granting an exception.
4. Holder shall take all necessary precautions to prevent radio and television interference due to turbine operation. The Holder shall provide alternate reception modes when radio or television interference is documented.

RECORD OF DECISION - SEAWEST/PacifiCorp Windpower Project

5. The Holder shall notify the Authorized Officer of any tower collapse, blade throw, wind farm caused fire, or significant injury to worker within 24 hours of any such occurrence.
6. The Holder shall develop a turbine identification system whereby each turbine tower shall be assigned a unique identifier. This identification shall be affixed to each tower and include the nameplate rating of the turbine. A description of the system and map showing tower locations and numbers shall be submitted to the Authorized Officer before start of wind farm operations.
7. The Holder shall provide a bond in the amount of \$2,000.00 per turbine installed on Public Land, to be maintained until restoration of disturbed areas and other requirements relative to the construction phase of the project have been accepted by the authorized officer. Upon completion, or partial completion of these construction related requirements, the authorized officer may terminate or reduce the amount of the bond.
8. Federal coal resources underlie a portion of the Simpson Ridge Project Area. To prevent Federal coal resources from being devalued by surface improvements, the grant holder may place wind energy facilities on the Public Lands identified below, but bears the responsibility for repair, replacement, or lost revenue should the BLM subsequently lease Federal coal and the mining of such coal damage or impair the operation of wind energy facilities. The lands subject to this condition are:

T. 21 N., R. 80 W.

Section 12: ALL
Section 14: ALL

T. 22 N., R. 80 W.

Section 22: NE $\frac{1}{4}$, S $\frac{1}{2}$
Section 26: N $\frac{1}{2}$ NW $\frac{1}{4}$, SW $\frac{1}{4}$ NW $\frac{1}{4}$
Section 34: ALL

The following measures are included in the ROW Grant (WYW-130929):

1. The Holder shall follow mitigation measures Numbers 1, 3, 4, and 9 - 20 located on pages xi-xiv of the Final EIS, dated August 1995.
2. The Holder shall not initiate any construction or other surface disturbing activities on the right-of-way without prior written authorization of the authorized officer. Such authorization shall be a written notice to proceed issued by the authorized officer. Any notice to proceed shall authorize construction or use only as therein expressly stated and only for the particular location or use therein described.

The following measures are included in the ROW Grant (WYW-136588):

1. The Holder shall submit a final map showing the location of all roads to be used for access to power line Right-of-Way WYW-130929. The map shall show the roads in three categories: a) used with no improvement, or maintenance within the existing disturbed area only, b) used with surface disturbance required outside of existing disturbed areas, and c) new construction.

RECORD OF DECISION - SEAWEST/PacifiCorp Windpower Project

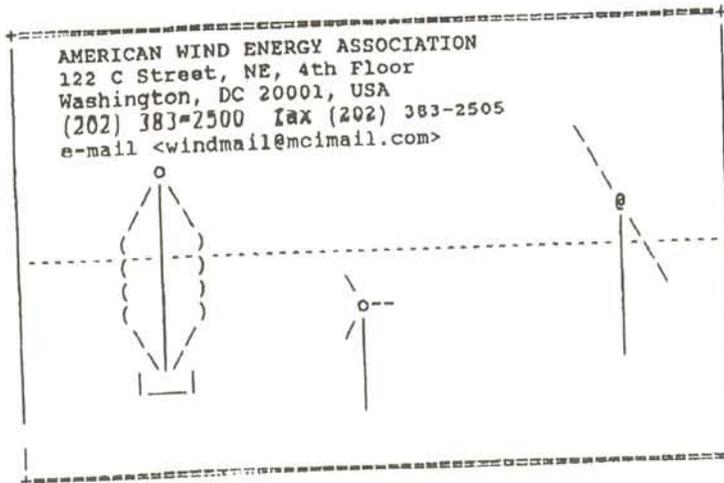
2. The Holder shall submit a Class III Cultural Resources Inventory Report for any roads in Category b or c in the above item.
3. The Holder shall not initiate any construction or other surface disturbing activities on the right-of-way without prior written authorization of the authorized officer. Such authorization shall be a written notice to proceed issued by the authorized officer. Any notice to proceed shall authorize construction or use only as therein expressly stated and only for the particular location or use therein described.

E. FINAL EIS COMMENTS

The BLM received six comment letters on the final EIS. Commentors included:

- a conservation organization
- the Wyoming Game and Fish Department
- two individuals
- an industry association
- a state regulatory agency

The BLM's responses to these comments are presented below. Copies of the letters are located before BLM's response.



September 27, 1995

Walter F. George
 Project Leader
 Rawlins District Office
 1300 Third Street
 Rawlins, WY 82301



COMMENTS ON FINAL ENVIRONMENTAL IMPACT STATEMENT
 KENETECH/PACIFICORP WINDPOWER PROJECT

Dear Walt:

Thanks for the opportunity to comment on the Final Environmental Impact Statement (EIS). The American Wind Energy Association (AWEA) offers the following comments:

1. We commend the Bureau of Land Management on the thoroughness of the EIS, particularly the revised section on wildlife impacts.
2. Several of those who commented on the Draft EIS mentioned that they would like to see it include information about the emissions offsets that might be expected from wind development. The Final EIS does address this issue well.

The question of emissions offsets raises an interesting and important point about wind energy development: it is qualitatively different from most other forms of development, in that it significantly BENEFITS the environment by offsetting the harmful impacts of other methods of generating electric power.

AWEA has recently developed a fact sheet on avian issues. As part of an early draft version of that fact sheet, we identified

a number of negative environmental impacts of other electricity sources:

"Wind energy's impacts on the environment are primarily positive because wind turbines replace other, more damaging power sources.

Currently, America depends on coal, the most environmentally damaging fuel, for nearly 60 percent of its electric power.[1] Replacing any part of that production with wind would greatly benefit the environment.

"Wind energy's environmental effects include:

- o Reduced emissions of greenhouse gases. The U.S. leads the world in emissions of carbon dioxide, the most important greenhouse gas, producing more than 5 billion tons annually, threatening agricultural economies and low-lying cities worldwide through global climate change. In 1989, the editors of Science magazine, the official publication of the American Association for the Advancement of Science, concluded that global warming is the most serious environmental problem that humans face: 'As serious as the problems of acid rain, toxic waste, and depletion of the ozone layer are, the greenhouse effect looms over all of them because it poses such great potential damage to the environment and is by far the most difficult to solve.' [2]

A single windfarm-scale turbine, by replacing fossil fuels, avoids the emission of about 1,000 tons of CO2 each year.[3]

Wind energy is capable of contributing substantially to U.S. energy supplies, while at the same time reducing the output of global climate-changing gases. It has been calculated that a forest of more than 100 million trees would be needed to provide the same carbon dioxide reductions as the 16,000 wind turbines currently installed in California.[4]

- o Reduced emissions of air pollutants and acid rain-causing chemicals. Fossil fuels also produce large amounts of sulfur dioxide and nitrogen oxides, two key ingredients in air pollution and acid rain. A single windfarm-scale turbine, replacing fossil fuels, avoids the emission of about 15,000 pounds of these substances each year.
- o Reduction in other damaging environmental effects of other energy sources:
 - Fewer oil spills.
 - Less poisoning of inland lakes by methyl mercury (one-third of all methyl mercury comes from coal-fired power plants).
 - Less strip mining.

- Fewer radioactive emissions from nuclear plants.
- Less production of nuclear waste.
- Fewer fish kills from heated nuclear and fossil power plant wastewater.
- Less damming of free-flowing rivers and streams for hydropower."

3. A useful perspective with respect to wind energy's impact on birds specifically was presented recently by the Netherlands affiliate of Birdlife International. The following article from a recent issue of the AWEA newsletter "Wind Energy Weekly" summarizes the Dutch group's action:

[From Wind Energy Weekly #664, 18 September 1995, p. 5]

DUTCH BIRD GROUP ISSUES
STATEMENT BACKING WIND

The Dutch group Vogelbescherming Nederland, an affiliate of Birdlife International, has released a statement endorsing wind energy as environmentally preferable to the burning of fossil fuels, according to Windpower Monthly magazine.

The statement, which also says that global warming and the rising sea levels accompanying it are a much more serious threat to birds than wind turbines, is based on the studies of biologist Johanna Winkelman. Winkelman has carried out extensive research on birds and wind energy over the past 10 years, including a major study of an 18-turbine array at Oosterbierum owned by the utility SEP.

Winkelman estimates, on the basis of the Oosterbierum work and other European studies, that if the Netherlands installs 1,000 MW of windpower as currently planned, about 21,000 birds would die annually in collisions with turbines. However, she said, power lines and antennas kill 1 million birds a year in the Netherlands, while hunters kill 1.5 million and auto traffic kills 9 million.

While wind turbines may also disturb brooding and nesting behavior of birds, Winkelman said, there is some evidence to indicate that birds that live near wind turbines adapt to them over time. Also, she said, the species most subject to collisions with turbines are largely common ones.

4. We have spoken generally above about the benefits of wind energy in helping to reduce global climate change. Yet "climate change" is such a broad and vague term that it is easy for one to fail to comprehend the challenge that increasing concentrations of greenhouse gases in our atmosphere present for many endangered

species.

An instructive example which zeroes in more closely on this issue is provided by the following news release from Australia's Environmental Resources Information Network (ERIN), which is taken from the World Wide Web (<http://www.erin.gov.au>):

CLIMATE CHANGE TO AFFECT THREATENED SPECIES

Australia's threatened species are likely to undergo alarming contractions in their habitats in the event of climate change, according to a study undertaken by the Environmental Resources Information Network (ERIN) for the Australian Nature Conservation Agency and commissioned by the Commonwealth Department of the Environment.

Using a number of climate change scenarios to examine the potential impact of global warming on 57 of Australia's threatened vertebrate species, the study is the first in the country to look at the potential impacts of climate change on threatened native fauna nation-wide.

Under the lowest impact scenario, 46 (84 per cent) of the 57

threatened species experienced a reduction in the extent of their climatic habitat. These species included the Kowari, Greater Bilby and Southern Cassowary.

Under two more extreme scenarios, 54 and 55 (95 and 96 per cent) species experienced a reduction in the extent of their climatic habitat, of which 7 (12 per cent) experienced a complete elimination of climatic habitat and therefore possible extinction in the wild.

These species included the Eclectus Parrot, Northern Hairy-nosed Wombat, Carpentarian Grass wren and Pink-tailed Legless Lizard.

The study used a bioclimatic computer modelling tool called BIOCLIM. The model, which incorporated a climate change module, simulated the impact of climate change on the distribution of threatened fauna compared to historical (including present day) distribution patterns.

Considerably greater reductions in habitat for these threatened species would occur under higher regimes of warming than that used in the project. The model used in the project assumed a one degree Celsius average global warming. This estimate of warming is conservative as the Intergovernmental Panel on Climate Change has estimated a likely increase in global average surface temperature of 1.5 to 4.5 degrees Celsius for a doubling of carbon dioxide levels. In addition, some scientists now believe that atmospheric carbon dioxide levels are likely to be

stabilised at up to 3 times the pre-industrial levels. The study did not incorporate other environmental factors such as predation which may affect the distribution of threatened fauna.

The study will enable environment policy makers and land managers to consider options for wildlife management under climate change. The research provides a basis for continuing work on the possible effects of climate change on Australia's flora and fauna.

Further information available on ERIN On-line Services

23 February 1995
ERIN World Wide Web comments and queries please.

The Intergovernmental Panel on Climate Change (IPCC), a 2,500-member international organization of scientists and policymakers concerned with climate change, has recently released a draft report stating that research findings are now beginning to clearly identify human activities as contributing to the gradual rise in global average temperatures over the past century.

The IPCC's finding is a major step toward ending the debate among the world's scientific community on the existence of climate change, and toward moving the focus to actions the world's governments can take to reduce or slow that change. It seems very likely that measures to encourage the use of renewable energy will be prominently featured.

We urge the Bureau of Land Management, in making its decision on the Kenetech/Pacificorp Windpower Project, to consider this issue carefully along with the many others raised by the Final EIS. While the Final EIS is very thorough, of necessity it has focused largely on local impacts and has not included some of the more far-reaching positive effects of wind generation.

5. We endorse the findings of the Final EIS with respect to the need for the developers of the Kenetech/Pacificorp Windpower Project to select the best and most economical wind site for development. It is highly likely that as utility deregulation proceeds, a spot market for electricity will develop in which very low short-run prices will predominate. Wind energy is having difficulty today penetrating the generation market because of competition from very cheap gas turbines, and it appears that this problem will intensify, at least temporarily, under deregulation.

Sincerely,

Thomas O. Gray
Northeast Representative
American Wind Energy Association

NOTES

[1] Cool Energy: Renewable Solutions to Environmental Problems, Brower, M., Revised Edition, 1992, p. 11. MIT Press, Cambridge, Mass., and London, England.

[2] "Solar Power and Priorities," Koshland, D., Jr., Science, Vol. 245, No. 4920, August 25, 1989, pg. 805. American Academy for the Advancement of Science, Washington, D.C.

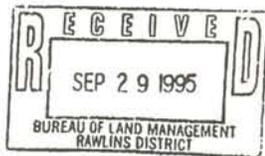
[3] Calculation by AWEA, based on production of a 500-kW wind turbine at 30 percent capacity factor displacing average emissions from the U.S. energy mix.

[4] Calculation by AWEA, based on information from Global ReLeaf on annual carbon dioxide uptake of the average tree.

RECORD OF DECISION - SEAWEST/PacifiCorp Windpower Project

Response to Comments from the American Wind Energy Association

Comments from the American Wind Energy Association were supportive of the project and provided additional information on the benefits of wind energy. These comments are accepted for the record.



September 28, 1995

Mr. Walt George
Bureau of Land Management District Office
Post Office Box 670
Rawlins, Wyoming 82301

Dear Mr. George:

We are writing this letter to comment on the Final Environmental Impact Statement for Kenetech/PacifiCorp Windpower Project in Carbon County, Wyoming.

In our comments on the DEIS we suggested that a similar but less environmentally critical area such as Simpson Ridge be developed first. This development should include an intensive research plan to determine if the Foot Creek Rim Project can be constructed without being so environmentally destructive or if a different sight is the only solution. We suggested Simpson Ridge because they are planning construction there in a few years and have already done studies of that area.

The answer to this proposal was that no other sight was considered or studied. This answer indicates to us that the FEIS is inadequate and unacceptable.

We are very much in favor of windpower but not blindly rushing into its development without sufficient research to include the proper safeguards necessary to protect our precious and disappearing wildlife.

Recently we were shown a video put out by Kenetech with testimonials by very well known raptor research specialists that indicated Kenetech gave special attention to critical raptor areas and choose alternate sights when necessary to protect these great birds.

How can they defend this pledge in light of the proposal on Foot Creek Rim?????

Thank you for this opportunity to express our concerns about this project.

Sincerely,

Frank C. Layton
Lois L. Layton
Frank C. Layton
and

Lois L. Layton
Post Office Box 2851
Casper, Wyoming 82602-2851

RECORD OF DECISION - SEAWEST/PacifiCorp Windpower Project

Response to Comments from Frank C. and Lois L. Layton

BLM concurs that Foote Creek Rim may be a high-use area for raptors. Where possible, turbine strings were located on top of the rim, away from the areas of highest raptor use. Other siting constraints (e.g., setback requirements, wind patterns, etc.) precluded avoiding all raptor use areas. However, many of the factors that are thought to contribute to raptor mortality have been eliminated from this project. Perching opportunities will be limited by the use of tubular towers and no above-ground power lines in the wind farm. Slower rotor speeds are also thought to reduce potential for collision-related mortality. During monitoring, the factors contributing to mortality will be evaluated and appropriate mitigation measures implemented. If the assertion that high-use areas are associated with unacceptable collision-related mortality is found to be accurate, retrofitting and enforcement steps would be taken (as described in Sections 2.1.11 and 8.2.3.4 in the FEIS) and raptor use will be a major determining factor in future siting of windpower facilities on Public Land.

BLM clearly understands that the proposed action may have significant impacts; the significant or potentially significant impacts identified in the EIS were given the most weight during the decision making process. Significantly impacted resources are also the focus of BLM's actions to protect, restore, and enhance the environment. For example, collision-related mortality of threatened or endangered raptor species would be a significant impact; therefore, a suite of mitigation measures and monitoring requirements were incorporated into the proposed action to protect these resources.

At this time, BLM is authorizing construction of Phase I only. Subsequent phases will undergo complete NEPA analysis (see Section 8.2.6 in the FEIS). BLM is requiring this phased analysis/approval process because of the uncertain nature of future and cumulative impacts from this project. Anticipated impacts from Phase I are not so severe to warrant an alternative location for the first phase of development.

New York State Department of Environmental Conservation
Division of Regulatory Services - Room 538
50 Wolf Road, Albany, New York 12233-1750
Telephone: (518) 457-2224 Fax: (518) 457-5965



Michael D. Zagata
Commissioner

September 29, 1995

Mr. Walter George
Project Leader
Rawlins District Office
U. S. Department of the Interior
Bureau of Land Management
1300 Third Street North
Rawlins, WY 82301

Re: Wyoming 500 MW (Phased) Wind Energy Project

Dear Mr. George:

Staff of the NYS Department of Environmental Conservation (DEC) have studied the August 1995 U. S. Department of the Interior/Bureau of Land Management (BLM) "Final Kenetech/PacifiCorp Windpower Project Environmental Impact Statement" for a phased 500 MW wind energy facility with great interest, since a Renewable Energy Proceeding is considering the implementation of up to 60 MW of wind energy facilities in New York State as a market test demonstration.

Other commitments prevented our review of the January 1995 DEIS at that time. We have now briefly reviewed it to facilitate understanding of the FEIS. The enclosed comments will mostly focus on the modifications of the DEIS which are reflected in the FEIS.

We find the FEIS to generally incorporate thorough analyses of various potential environmental impacts. These comments are intended to assist BLM in this action. In the long term, renewable resources will need to be society's primary source of energy, since fossil resources are, by definition, finite and are indispensable raw materials for the petrochemical industry. In the short term, energy security and environmental considerations should be balanced with economic considerations. However, this windpower project appears to compete favorably with other forms of energy generation with regard to economic considerations, so that such balancing is not required.

- 2 -

Please keep me abreast of the environmental and performance aspects of this project. Thank you for the opportunity to comment. You may call me at (518) 457-7718 if there are questions.

Sincerely,

Orest Lewinter
Orest Lewinter
Environmental Analyst 2

GEORGE.OL
Enclosure
cc: K. Silliman
Renewables Task Force
C. Vandrei

21



NYS DEPARTMENT OF ENVIRONMENTAL CONSERVATION COMMENTS ON
AUGUST 1995 FEIS ON 500 MW KENETECH/PACIFICORP WINDPOWER PROJECT

- 2 -

1. P. 1-1, Section 1.1, Purpose and Need

The revised paragraph for p. 1-6 of the DEIS states that BPA presently has a surplus of generating capacity. It is not clear whether that excess is above the reserve margin. Also, in the same paragraph, the term "small-scale wind demonstration projects" does not appear to be accurate, since 500 MW is not small scale.

2. Pp. 2-11, 2-13, 2-15, 4-7, Impacts on Meteorology and Climate

- a. It is stated that the wind systems could cause snow redistribution (snow drifts) resulting in potential impacts to wildlife, vegetation, soils, etc. It should be noted that such impacts could be beneficial as well as deleterious, since snow drifts would result in both deeper and shallower snow depths.
- b. The possibility that the large number of wind systems could capture sufficient energy to affect the wind regime (i.e., reduce average wind speed and increase turbulence) and thereby affect ecosystems (either positively or negatively) should be addressed.

3. P. 4-7, Section 4.3, Cultural and Historic Resources

Two modified paragraphs (p. 4-71, column 2, paragraph 3, and p. 4-72, column 2, paragraph 3, line 24) should include or reference the mitigation stated on p. 5-3; i.e., the contingency plan for discovery of artifacts during construction.

4. P. 5-3, Section 5.1.1.2 Practices: Wildlife and Fisheries and P. 8-18, Section 8.2.4

It is stated that windplant impacts on wildlife will be monitored and studied during operation. The FEIS should include a contingency plan in the event that the studies find significant impacts. For example, which mitigation measures could be retrofitted or to what extent could the facility be removed, if necessary?

5. P. 8-1, Section 8.1.1, Response to Rawlins Public Meeting Speaker 7: Avian Mortality

The response states that the wind systems are thought to have several design features that would reduce avian mortality. The response appears to indicate that these mitigation measures have not yet been tested. If this is the case, it is wise to begin with the 71 MW wind farm to learn the effectiveness of the measures - see also comment 4 above.

6. Pp. 8-71 to 8-73, Table 8.4, Comparison of Various Power Generating Resources

- a. The applicability of this table should be stated; i.e., state or region.
- b. The capital cost of wood waste biomass energy should be readily available.
- c. This table should be combined with Table 1.2 of the DEIS.

- d. The operations and maintenance costs for solar energy (22 mills) would likely be too high to represent photovoltaics, so the data must describe thermal solar. Solar photovoltaics (both decentralized and centralized) should also be included.
- e. The origin of the 19 mill operations and maintenance cost for wind energy should be described in a footnote. Does the cost refer to earlier experimental systems?

7. DEIS p. 4-90, Section 4.5.2.5, Recreation

It is stated that the novelty of the windplant will cause some travelers to view the area with interest. This may be true until the novelty wears off. Although we cannot make a judgment about the visual/aesthetic impact of this particular action, a proliferation of poorly sited windplants in scenic areas across the country could very rapidly dampen the public's enthusiasm for this energy source.

RECORD OF DECISION - SEAWEST/PacifiCorp Windpower Project

Response to Comments from the New York Department of Environmental Conservation

Comment #1 The surplus of generating capacity is above the reserve margin (personal communication, October 1995, with Richard Stone, BPA). BPA has agreed to purchase 25 MW of power from the first phase of development; therefore, their interest in the project is "small-scale."

Comment #2(a) BLM concurs that impacts due to snow redistribution could be beneficial as well as deleterious.

Comment #2(b) BLM concurs that overall reduction in wind energy within the wind farm could affect ecosystems in the project area, principally due to snow redistribution. However, the wind's energy is completely restored within approximately 10 rotor-diameters downwind of turbines; therefore, the project's influence on ecosystems outside of the project area will be negligible. Within the project area, it is likely that snow redistribution will have an effect on potential landslide areas (Section 4.1.4 in the DEIS), soils (Section 4.1.6 in the DEIS), surface hydrology (Section 4.1.7 in the DEIS), plant communities (Section 4.2.1 in the DEIS), and wildlife (Section 4.2.3 in the DEIS). These effects may be beneficial or adverse.

Comment #3 The reference to 5-3 is appropriate.

Comment #4 The FEIS discusses criteria for retrofitting portions of the wind farm, cessation of wind farm operations, and initiating additional monitoring studies in Sections 2.1.11, 8.2.3.4, and 8.2.3.2 respectively. The processes outlined in these sections provide BLM and USFWS with mechanisms for mitigating impacts if they are found to be unacceptable.

Comment #5 At this time, BLM is authorizing construction of Phase I only. Subsequent phases will undergo complete NEPA analysis (see Section 8.2.6 in the FEIS). BLM is requiring this phased analysis/approval process because of the uncertain nature of future and cumulative impacts from this project.

Comment #6 Table 8.4 was reproduced from Western Area Power Administration's Energy Planning and Management Program DEIS (1995) and was included in the FEIS as educational material. It was not intended to be a comparison of the proposed project with other power-generating resources.

- a) On page 8-70 in the FEIS, it states that the information contained in the table is generic (i.e., it does not apply to a particular plant, but represents a range of plants or calculated values).
- b) Because this table was prepared by WESTERN, BLM did not attempt to obtain missing data.
- c) It is not appropriate to combine Table 8.4 with Table 2.1 in the DEIS because data were obtained from different sources and possibly via different analysis techniques; therefore, the data are not directly comparable.
- d & e) BLM acknowledges these questions; please refer to WESTERN's Energy Planning and Management Program DEIS (cited in the FEIS) for this information.

Comment #7 The project area regularly receives new visitors traveling on Interstate-80; therefore, the wind farm will always have novelty status to some travelers. BLM concurs with the assertion that poorly sited windpower facilities may cause public concern. The BLM analysis process precludes siting of windpower facilities in scenic areas. BLM has identified changes to the appearance of the project area (Section 4.5.2.1 and 4.6 in the DEIS). Most of the project area is rated as a Visual Resource Management (VRM) Class III; Class III areas are managed to "minimize adverse effects on visual resources while maintaining the effectiveness of land use allocations" (Great Divide Resource Area Record of Decision 1990). Changes to the landscape in Class III areas are not in conflict with the decision. The management system, which is

RECORD OF DECISION - SEAWEST/PacifiCorp Windpower Project

described in Section 3.6 in the DEIS, places stringent controls on development in scenic areas, designated as VRM Classes I and II. Therefore, BLM has mechanisms in place to avoid scenic areas when development proposals are received.

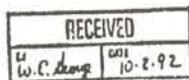
BIODIVERSITY ASSOCIATES
and FRIENDS OF THE BOW

P.O. Box 6032, Laramie, WY 82070
(307) 742-7978 (voice) 742-7989 (fax)

October 1, 1995

Submitted by fax
Total pages: 9

Walter E. George
Project Leader, Kenetech/PacifiCorp Windpower permit application
BLM Rawlins District Office
1300 Third Street
Rawlins, WY 82301
Fax: (307) 328-1474



Dear Mr. George:

These are our comments on the Final Environmental Impact Statement (FEIS) prepared for the Kenetech/PacifiCorp Windpower permit application.

1. The permit should be denied because the record shows the environmental impacts will be significant and unacceptable.

While a number of potentially significant impacts of the project are still unknown (see, e.g., FEIS at 8-24), the DEIS, FEIS, and Biological Assessment (BA) acknowledge that the project is likely to cause a number of very significant impacts. In particular, the record shows:

60,619 acres of undeveloped land would be developed (FEIS at ix) and the "character of the large portions of the [project area] would change from rural undeveloped to a predominantly industrial landscape" (DEIS at 4-95);

"Windplant development would result in a conflict with ... [the Visual Resource Management] objectives on approximately 24,192 acres" of the project area, including all of Foote Creek Rim (DEIS 4-96), "which constitutes a significant cumulative visual impact" (DEIS at 4-95);

approximately 653 miles of new roads would be constructed for the entire project (DEIS at 1-4);

"Direct mortality resulting from the ... Windplant would present the largest potential source of impact to the regional bald eagle population" (BA at 44);

Impacts to Golden Eagles would be even greater than those to Bald Eagles given that there over 55 times more Golden Eagles sightings (778 Golden versus 14 Bald) along Foote Creek Rim during the past breeding season;¹

"Cumulative impacts to the regional ferruginous hawk population could be potentially significant due to direct mortality associated with the proposed [wind turbine generators]" (BA at 48);

"impacts to mountain plovers from the first phase of development and any future development on the Foote Creek Rim area would probably be significant" (BA at 52);

"The proposed Windplant may be the largest source of direct mortality to peregrine falcons in the area; any mortality to this species would be considered a significant impact" (BA at 60);

"An ethnohistoric/ethnographic analysis of the Foote Creek Rim Archaeological District showed that impacts from the proposed project are potentially significant" (FEIS at 4-7);

"Scientifically significant fossils may occur anywhere within the project area" (FEIS at G-19), and "Adverse impacts to fossil resources are most likely and could be significant" (FEIS at G-20).

The FEIS does not demonstrate that granting the permit would provide such a clear and overriding benefit to the public as to justify these significant impacts to the environment. The Bald Eagle and Peregrine Falcon are threatened with extinction; the Ferruginous Hawk and Mountain Plover (total estimated population of about 5,000 individuals) are probably also threatened with extinction but have yet to be listed because of political interference. Additional impacts to these species and their habitats are unacceptable and should be allowed only when there is a clear and overriding National need. See, e.g., Tennessee Valley Authority v. Hill, 437 U.S. 153, 174 ("examination of the language, history, and structure of the Endangered Species Act indicates beyond doubt that Congress intended endangered species to be

¹ These numbers were obtained from the data on FEIS pages 3-21 (total eagle counts during breeding season = 792) and 3-23 (Bald Eagle counts during breeding season = 14). The number of Golden Eagles observations during breeding season is therefore 792 - 14 = 778. The ratio of Golden Eagles to Bald Eagles is then 778:14 > 55:1.

afforded the highest of priorities.")² The same is true of significant archeological resources, paleontological resources, scenic vistas,³ and tracts of undeveloped public land.

The construction of one windpower plant -- to provide profits for a private corporation and to supply electricity to consumers in other states who have the option of reducing electricity consumption -- does not rise to this level of importance. The plant will not significantly reduce the global production of greenhouse gases; the plant will not reduce consumer electricity prices; and there is no unmet demand for electrical power that justifies construction of the plant. Based on this information, the permit should be denied.

2. The permit must be denied because it would violate the Bald and Golden Eagle Protection Act.

We have elaborated on this issue in our previous comments. While the BLM responded to this issue in the FEIS, we do not agree with the FEIS's intimation that this project is exempt from the Bald and Golden Eagle Protection Act. FEIS at 8-13. Rather, it is still our position that issuing a permit to allow an activity that will cause the deaths of Bald and Golden Eagles would violate the Act. Similar remarks apply to violations of the Migratory Bird Treaty Act. The BLM cannot authorize an activity that would violate Federal law. Therefore the permit should be denied.

3. The permit should not be issued because there is insufficient information in the record to make a determination of whether or not the project's other impacts would be unacceptable.

² In this ruling, the Supreme Court added that "The plain intent of Congress in enacting [the Endangered Species Act] was to halt and reverse the trend towards extinction, whatever the cost" (id. at 184); that it was a "conscious decision by Congress to give endangered species priority over the 'primary missions' of federal agencies" (id. at 185); and that "[t]he value of ... genetic heritage is, quite literally, incalculable.... From the most narrow point of view, it is in the best interests of mankind to minimize the losses of genetic variations" (id. at 179, quoting H.R. Rep. No. 93-412, pp.4-5 (1973)).

³ The FEIS fails to assess the visual degradation the windplant would cause to the adjacent Rock Creek Roadless Area -- an area eligible for Wilderness designation. Many people in Wyoming and even the U.S. Forest Service have recommended that this area be preserved as Wilderness. The windplant would be visible from many locations within the Rock Creek Roadless Area. To become a designated Wilderness, "the imprint of man's work" must be "substantially unnoticeable" from within the area. Thus, it is likely that the construction of the windplant would foreclose the possibility of Wilderness designation for the Rock Creek Roadless Area. 16 USC § 1131(c)(1). This is a very significant impact and irreversible commitment of resources.

While we feel the FEIS already demonstrates that many of the impacts from the windplant -- even under the initial limited development scenario -- would be unacceptable, the FEIS still fails to adequately assess the magnitude of other potentially significant impacts.

For instance, on page 47 of the Biological Assessment, it states "It is presently unknown if the ferruginous hawk population in southern Wyoming has localized recruitment; therefore, potential impacts of collision-related mortality on this population remain unclear." If recruitment is local, the windplant could contribute to the jeopardy of the local population. The BLM would (presumably) not allow development of a project that would cause such a jeopardy situation (we think the ESA prohibits such projects), so information on recruitment is essential to the permit decision. Nevertheless, no effort was made to gather this essential information. The FEIS did not comply with the CEQ regulations regarding incomplete information. 40 CFR § 1502.22. There are ways to determine if recruitment in a subpopulation is local or not; these methods were simply ignored because applicant wants a "fast-track" review and did not want to take the time to gather the information. This is unacceptable. The public and decisionmaker should not be denied essential information simply because the applicant doesn't want to wait.

The FEIS contain numerous other statements about unknown impacts. See, e.g., FEIS at 8-24 (cumulative impacts of habitat loss cannot be quantified using existing data); see also FEIS at 8-74 (BLM agrees that it would be useful to compare impacts of various power-generating resources on wildlife species. Unfortunately, this type of analysis has not, to our knowledge, been completed for any project or regional planning document.") If impacts cannot be quantified using "existing data," the agency should obtain the data it needs to quantify the impacts. (If agencies only relied on "existing data," no new data would ever be collected.) Likewise, just because no analysis of a particular type has been conducted for another project, this does not absolve the agency of conducting the analysis for the first time if it would be useful in reaching the ultimate decision.

Finally, we point out that the Fish and Wildlife Service has yet to issue its Biological Opinion on this proposal. The BO is essential to understanding the nature of the impacts to listed species; it is also essential for knowing what reasonable and prudent alternatives (including mitigation measures) are appropriate for the project). The FEIS should not have been issued until the BO was available so the public could understand the nature of the impacts to listed species and advocate for an appropriate alternative (e.g., no action) based on that information. The same is true of the cultural/historic resources evaluation -- which appears not to have been conducted yet -- and the yet-to-be completed Class III paleontological surveys (FEIS at G-22). The BLM cannot know how significant the impacts will be until the surveys

are complete; likewise, the agency cannot know if the impacts can be mitigated until the mitigation measures are determined and evaluated for effectiveness. The FEIS did not contain this essential information. Once again, the "fast track" approach has compromised the NEPA process.

We explained in our previous comments that the BLM has an obligation to collect clearly essential information and disclose that information in the FEIS. Even so, key questions about the impacts of this project remain unanswered, "unclear," "unknown," and "uncertain." Given these uncertainties, the BLM has no basis for deciding whether to issue the permit in light of the numerous other unassessed and potentially significant impacts -- and this is true even if the BLM somehow finds the significant impacts that actually have been determined in the FEIS (see Section 1 above) to be acceptable. Expressed differently, a decision to issue the permit would not be defensible because the agency does not know what the trade-offs would be. Accordingly, the BLM should deny the permit.

If, after reviewing the FEIS and public comment on it, the BLM still contemplates issuing the permit, it should not reach any decision until the FEIS is supplemented with additional analysis (together with an opportunity for public comment) so that the trade-offs can be properly understood.

27

4. The permit should not be issued because the FEIS fails to demonstrate compliance with cultural/historic site preservation requirements.

In response to our comments that cultural and historic resources had to be inventoried and evaluated, the FEIS simply refers us back to this same statement in the DEIS. See FEIS at 8-74 (response to issue AM11 raised in our March 15, 1994 comments, FEIS page 8-70) which only refers back to the DEIS, not to the FEIS or any other supporting document such as a cultural resources survey. According to the Draft EIS:

"There are 56 prehistoric sites within the ... [project area]. * * * Eligibility determinations have not been made for the prehistoric sites due to the ongoing National Register evaluations. Eligibility determinations will be included in the FEIS for this project."

DEIS at 3-80 (emphasis added). Nevertheless, the eligibility determinations were not included in the FEIS as the DEIS promised -- in fact, the determinations may not have even been made yet -- so neither the public nor the decisionmaker have any basis for determining how significantly those resources would be impacted by the proposed windplant. The permit cannot be issued unless and until an adequate site-specific survey is conducted of the entire project area and all identifiable cultural and historic resources are evaluated for their significance. If the resources turn out to be significant, the permit must be denied on this ground as well.

5. The permit issuance/denial criteria must be listed and explained in the Record of Decision.

We raised this issue in our comments, but it was essentially ignored. The FEIS does not list any threshold criteria for permit issuance/denial. For instance, how many eagle deaths does BLM consider unacceptable in deciding whether to issue the requested permit? How many acres of Mountain Plover breeding/nesting habitat must be destroyed before the permit would be denied as posing an unacceptable risk to this troubled species? How many archeological sites would have to be damaged before the permit would be withheld? The FEIS is silent.

Without such information, it is impossible for the reviewing public to determine whether the BLM would issue the requested permit regardless of the environmental impacts it would cause. That is, there will be no way of knowing whether the decisionmaker gave proper weight to environmental protection or gave it no weight whatsoever. As noted above, the FEIS and Biological Assessment are rife with indications that the adverse impacts of the windpower plant would be significant. Given that some of these impacts could be very significant -- involving endangered species (listed and unlisted), other federally protected species (e.g., Golden Eagle and other migratory birds), significant archeological and paleontological resources, and at least one potential wilderness area -- there is at least a serious question as to whether the trade-offs in issuing the permit could be considered acceptable. While we believe the record already shows the trade-offs are unacceptable, if the BLM disagrees, the agency must at least explain the reasons for its position. It will not be enough for the ROD to simply state that the decisionmaker "considered the environmental impacts" and decided those significant impacts would be acceptable. The decisionmaker must state what the impacts are and explain why he or she thinks those particular impacts -- considered together and with similar impacts from other activities -- are acceptable or unacceptable. See, e.g., 40 CFR § 1505.2(b) (the ROD shall identify and discuss all factors which were balanced by the agency in making its decision and state how those considerations entered into its decision).

6. The ROD must list unambiguous, measurable criteria that would be used to determine whether to revoke or modify the permit, if it is issued.

Beyond failing to discuss any permit issuance criteria, the FEIS also fails to list any criteria that would cause the permit to be revoked or modified (e.g., to cease operation during heavy raptor migration seasons). Instead, the FEIS simply states things like "in the event of excessive mortality, USFWS would complete a thorough investigation to determine the extent, if any, of negligence on KENFTECH's part to use all available information and technology to minimize mortality." FEIS at 8-13. There is no explanation in the FEIS as to what constitutes "excessive" mortality as

opposed to acceptable mortality. Moreover, even if there were "excessive" mortality, "a thorough investigation" -- with nothing more -- does not correct the problem; fines and imprisonment (FEIS at 8-13) for "negligence" will also not assure the problem is corrected since "excessive" mortality may occur even if Kenetech is not "negligent." The means for correcting "excessive" mortality must include non-discretionary criteria for modifying the permit (e.g., requiring removal of turbines that are found to be problematic) and revoking the permit (e.g., removing all turbines if the entire project is found to be uncorrectably problematic). We expect such criteria to be included as enforceable provisions in the ROD. Without such criteria, at the minimum, the BLM cannot say it can assuredly mitigate the impacts if they are later found to be unacceptable.

7. The FEIS fails to consider reasonable alternatives.

A. *Sites.* The FEIS still fails to consider development of any site other than the applicant's preferred site (Foote Creek Rim-Simpson Ridge area). In personal discussions with us, the applicant has stated that other potential sites would pose similar impacts to raptors and other wildlife. So, they argue, that with impacts being similar, it makes the most sense to build a windplant on the most energetic site.⁴ The record contradicts this reasoning.

First, the maps in the FEIS (pages 3-21 through 3-38, 3-62) show that the distributions of eagles, hawks, falcons, and mountain plovers are highly variable. In fact, the observed densities of all these species drop drastically -- essentially to zero -- less than a mile from either side of Foote Creek Rim. The highest densities of all these species occur right along the ridgetops where the wind turbines would be constructed. This becomes shockingly apparent when the overlay of the proposed turbine locations (Appendix H to the FEIS) is placed over the species distribution maps in Chapter 3 of the FEIS. So, while constructing the turbines away from the ridgetops might be somewhat less preferable from an energy perspective, it would be substantially preferable from an environmental perspective. Constructing the plant away from the ridgetops in the project area was not given serious consideration as an alternative.

Second, the record shows that other ridges do not have the same densities of sensitive and endangered species as occur on Foote Creek Rim. For instance, the Biological Assessment states that while 36 Bald Eagle observations occurred on Foote Creek Rim, only 12 Bald Eagle observations occurred in the Simpson Ridge area. Most other species also apparently had lower densities on Simpson Ridge than

⁴ Actually, if the impacts were as great at all other potential wind sites, then the permit should be denied because there are no environmentally acceptable places to construct a windplant.

on Foote Creek Rim.⁵ Furthermore, the BA states that while Mountain Plovers "were routinely observed on top of Foote Creek Rim," they were not observed at all on Simpson Ridge. BA at 52. This shows that even ridges that are relatively close together can have very different wildlife abundances, and therefore much different environmental impacts. We are not suggesting that Simpson Ridge be developed in place of Foote Creek Rim -- we feel both sites pose unacceptable impacts. We are merely doing what the FEIS failed to do -- demonstrating by example that other sites would pose far less environmental impact, and those sites should be explored even if they would be less profitable to the applicant. BLM should decide whether to issue this permit based on the significance of the impacts, not on the profit margin of the permittee.

At the least, the FEIS still fails to demonstrate that other sites are not feasible. In this respect, we still believe the BLM is simply accepting -- without critical inquiry -- the applicant's assertions that no other site in Wyoming or the region is economically viable. The FEIS does not convince us otherwise; nor did the data we received through FOIA request. To the contrary, we were recently informed that another windplant is beginning the design phases, and it is planned for the eastern plains of northern Colorado just across the Wyoming border. If true, this is sufficient evidence to show that the applicant has misrepresented the truth about other potential sites. Therefore the permit should be denied.

B. *Mitigation.* Alternative mitigation measures were not considered as required by 40 CFR § 1508.25(b)(3).

C. *Timing.* The FEIS states that "Where environmental impacts are uncertain, it is within the agency's discretion to decide that the benefits of a project outweigh the benefits of delaying the project pending receipt of additional information." FEIS at 8-18. This may be true in some cases. However, where a potential jeopardy situation exists for a species' population or sub-population -- or where a violation of law may occur -- the BLM cannot so readily dismiss its information-collection obligations. We do not believe the BLM can make a convincing argument that the few benefits of issuing the permit immediately -- rather than in a year or two -- outweigh the significant environmental risks of proceeding without that

⁵ Some, though not all, of these differences may be attributed to the fact that Simpson Ridge was not surveyed as much as Foote Creek Rim -- which shows a bias in the NEPA analysis to only intensively analyze the applicant's preferred site on Foote Creek Rim. Meaningful comparisons could be made by evaluating #sightings per unit-time-surveying between the two Wyoming sites (and other potential sites). Unfortunately, the DEIS and FEIS did not contain such information. (On page 4-47 of the DEIS a table does show "No. Observed per 10-min Scan"; however, this table only allows comparison between the Foote Creek Rim site and two California sites -- it does not allow comparison of different sites in Wyoming).

information. This is particularly true where the agency asserts that the prospect of developing wind power in Wyoming will increase in the future. This means that delaying the issuance of the permit to collect essential information would only make permit issuance more favorable in the future. The FEIS is defective because it failed to consider alternatives of delaying the project to collect information needed to answer important questions.

Thank you for considering these comments. We feel there is a place for wind power in the future energy market. Unfortunately, based on the FEIS and BA, neither Foote Creek Rim nor Simpson Ridge are environmentally acceptable sites for the proposed windplant. Therefore, while we want to support alternative energy development, including wind power, we cannot support such a development at these particular sites -- at least with the current technology; the impacts are clearly unacceptable, and for this reason (along with the other reasons discussed in our comments), we urge the Bureau of Land Management to deny the applicant's permit. We do encourage the applicant to seek out potential sites in Wyoming and other parts of the region where wind power could be developed with far less environmental impact. There is no shortage of wind in Wyoming; there are shortages of eagles, hawks, falcons, mountain plovers, undeveloped lands....

Sincerely,

Donald J. Duerr

Leila R. Stanfield

for Biodiversity Associates/Friends of the Bow
P.O. Box 6032
Laramie, WY 82070

RECORD OF DECISION - SEAWEST/PacifiCorp Windpower Project

Response to Comments from Biodiversity Associates/Friends of the Bow

Comments from Biodiversity Associates/Friends of the Bow have been paraphrased to reflect BLM's interpretation of the comment and to facilitate clear understanding of the response.

Comment #1

Commentors contend that BLM should deny the ROW grant because the environmental impacts will be significant and unacceptable and there is "no unmet demand for electrical power that justifies construction of the plant."

They cite ten places in the draft or final EIS where significant impacts are disclosed. They conclude by stating that project benefits do not outweigh these impacts.

Response

The purpose and need for the project are described in Chapter 1.0 in the DEIS and the FEIS. This portion of the response is intended to reiterate and clarify the statement of purpose and need.

The commentors correctly assert that there is no present unmet demand for electric power; in fact, there is presently a surplus of generating capacity in many western states. However, human populations in the western states are growing, and utilities are forecasting long-term increases in demand for electric power (see Section 1.1.1 in the DEIS and Section 1.1 in the FEIS). Bonneville Power Administration (BPA) and the utilities participating in this project have determined that wind may be a viable resource to help meet these projected demands. Phase I owners have committed to a proactive approach to meet future needs and have invested in the Phase I project to evaluate the ability of wind resources to meet these needs.

The need, therefore, is two fold. First, in the long term, the power will be needed. While BPA and many utilities are implementing conservation measures within their service areas, long-term power deficits are still being forecast. Second, participating utilities need to evaluate the ability of windpower to cost-effectively meet these needs. If wind proves to be a cost-effective, power-generation source, it can be incorporated into the utilities' long-range plans for resource development. The critical element in this evaluation is cost-effectiveness; Section 8.2.1.1 in the FEIS explains why development at sites with less suitable winds would result in higher kWh costs and would render the project unfeasible.

The commentors also identified 10 instances where the DEIS or FEIS states that impacts could or would be significant. NEPA regulations do not prohibit a Federal agency from permitting a project because impacts could or would be significant; NEPA requires that an agency understand the environmental consequences of major Federal actions and take action to protect, restore, and enhance the environment [40 CFR 1500.1(c)]. BLM clearly understands that the proposed action may have significant impacts; the significant or potentially significant impacts identified in the EIS were given the most weight during the decision making process. Significantly impacted resources are also the focus of BLM's actions to protect, restore, and enhance the environment. For example, collision-related mortality of threatened or endangered raptor species would be a significant impact; therefore, mitigation measures and monitoring requirements were incorporated into the proposed action to protect these resources. Actions to protect, restore, and enhance other resources are described in Section 2.1.11 in the DEIS, Chapter 5.0 in the DEIS and FEIS, Section E in this ROD, and in the POD for Phase I.

Many of the impacts cited in the comment letter refer to impacts due to the proposed 500-MW development. At this time, BLM is authorizing construction of Phase I only. Subsequent phases will undergo complete NEPA analysis (see Section 8.2.6 in the FEIS). BLM is requiring this phased analysis/approval process

RECORD OF DECISION - SEAWEST/PacifiCorp Windpower Project

because of the uncertain nature of future and cumulative impacts from this project. Anticipated impacts from Phase I are not so severe to warrant denial of the application.

The commentors cited the following impacts noted in the DEIS or FEIS:

- changes in landscape character from rural to predominantly industrial
- visual resources management objectives
- 653 miles of new road construction
- bald eagle, golden eagle, ferruginous hawk, and peregrine falcon mortality
- mountain plover impacts
- cultural and paleontological resource impacts
- foreclosure of the possibility of wilderness designation for the Rock Creek roadless area.

Each of these impacts and the respective mitigation and/or monitoring measures are discussed in the DEIS and/or FEIS, with the exception of possible impacts to the Rock Creek roadless area, and will not be reiterated in this ROD. The Rock Creek Roadless Area is not recommended for wilderness designation in the current Medicine Bow Forest Plan. This area was released from wilderness study to multiple-use management by the Wyoming Wilderness Act of 1984 (P.L. 98-550, 10/30/84). This act states that areas not recommended for wilderness designations need not be managed to protect their suitability for wilderness designation. The term "roadless area" is descriptive and not a designation by the Forest Service.

In conclusion, BLM has identified the impacts associated with this project. Balancing the management considerations discussed in Section D, above, the assertion that the permit should be denied has been considered.

Comment #2

Commentors contend approving the project would violate the Bald Eagle Protection Act (BEPA) and the Migratory Bird Treaty Act (MBTA).

Response

BLM has consulted with the U.S. Fish and Wildlife Service (USFWS), the Federal agency responsible for enforcing the Endangered Species Act (ESA), the BEPA, and the MBTA. The USFWS comment letter on the DEIS (page 8-88 and Section 8.2.2 in the FEIS) documents project compliance with these three laws. An Incidental Take Permit and non-jeopardy Biological Opinion have been issued under the Endangered Species Act. A Special Purpose Permit has been issued under the Migratory Bird Treaty Act. On this basis, this comment has been addressed.

Comment #3

Commentors contend BLM has insufficient information to determine if the project's impacts would be unacceptable. They assert, "If impacts cannot be quantified using 'existing data,' the agency should obtain the data it needs to quantify the impact." They also contend

- BLM has not complied with 40 CFR 1502.22, concerning incomplete information,
- the Biological Opinion (BO) should have been released with the FEIS, and
- the FEIS should be supplemented with additional studies and another comment period provided.

RECORD OF DECISION - SEAWEST/PacifiCorp Windpower Project

Response

The BLM's position on decision making with insufficient information is presented in Section 8.2.4 in the FEIS and is in compliance with 40 CFR 1502.22, which requires Federal agencies to disclose where information is lacking or uncertain and to obtain that information if the overall costs are not exorbitant.

The BO is attached to this Record of Decision. Although the BO was not available when the FEIS was released, impacts to threatened or endangered species were completely disclosed in Section 4.2.4 of the DEIS. Input from the USFWS on threatened or endangered species impacts was used to develop mitigation measures and are considered in BLM's responses to comments in the FEIS. The public was not prevented from understanding the nature of impacts to these species.

The BLM's position concerning the need to prepare a supplemental EIS is presented in Section 8.2.11 in the FEIS, Section B of this decision and is in compliance with NEPA and Council on Environmental Quality (CEQ) regulations.

The assertion that the permit should be denied on the basis of insufficient information to make a decision has been addressed.

Comment #4

Commentors assert the BLM has failed to comply with cultural/historic site preservation requirements.

Response

As stated on page 3-78 in the DEIS, a Class III survey and site testing were completed on top of Foote Creek Rim and along transmission line ROW No. 3 in the spring of 1994, and the Class III reports are on file at the SHPO office. Results of Class III cultural resource studies were kept confidential as requested by Native Americans. Sites on Foote Creek Rim were determined eligible for inclusion on the National Register of Historic Places. BLM coordinated with the affected Native American Tribes, the State Historic Preservation Officer, and the Advisory Council on Historic Preservation as required by the National Historic Preservation Act (NHPA) and the American Indian Religious Freedom Act (AIRFA). A Memorandum of Agreement, signed by BLM, SHPO, Advisory Council, and SeaWest is attached to this ROD as evidence of compliance with NHPA and AIRFA.

To date, only Class I surveys have been completed for the remainder of the Foote Creek Rim area and the Simpson Ridge area. Class III surveys will be completed for these areas as they are proposed for development.

The assertion that the permit should be denied based on noncompliance with the National Historic Preservation and American Indian Religious Freedom Act and their regulations has been addressed.

Comment #5

Commentors request the permit issuance/denial criteria be listed and explained in the ROD.

Response

The permit would be denied if BLM identified any anticipated unacceptable impacts during the NEPA process. Based on the quantification of impacts presented in the DEIS and FEIS, BLM has determined that anticipated impacts from Phase I are not so severe as to warrant taking the no action alternative. The DEIS

RECORD OF DECISION - SEAWEST/PacifiCorp Windpower Project

and FEIS quantify, as much as practicable, the levels of collision-related mortality anticipated, physical habitat disturbance areas for mountain plovers and big game, the locations and acreage of land where significant visual impacts would occur, etc. These types of analyses were completed for each resource discussed in the EIS. For example, on page 4-68 in the DEIS it states that Phase I development would affect 1,229 acres of mountain plover nesting habitat. Given that mountain plovers may be attracted to disturbed areas, and that effects on mountain plover population indices will be monitored, this was considered an acceptable impact. Based on the analysis presented in the DEIS and FEIS, no unacceptable impacts from Phase I are anticipated.

BLM is requiring extensive monitoring to determine if this initial assessment of anticipated impacts is accurate. If impacts are more severe than anticipated, or if unanticipated, unacceptable impacts occur, BLM and/or the USFWS will require modifications of the wind farm operating regime.

Management considerations are identified and discussed in Section D of this document. The balance of both adverse and beneficial effects of this project are summarized in Section B. Commitment to mitigation measures such as tubular towers, no above-ground power poles in the wind farm, and implementation of the monitoring program is evidence that BLM understands that the proposed action could have significant environmental consequences and that has taken action to protect the environment (see response to Comment 1).

Comment #6

Commentors request the BLM to list unambiguous, measurable criteria that would be used to determine whether to revoke or modify the grant, if issued.

Response

The FEIS discusses criteria for retrofitting portions of the wind farm, cessation of wind farm operations, and initiating additional monitoring studies in Sections 2.1.11, 8.2.3.4, and 8.2.3.2 respectively. The processes outlined in these sections provide BLM and USFWS with mechanisms for mitigating impacts if they are found to be unacceptable.

Because specific cause-and-effects of collision-related mortality at wind energy facilities are unknown, it would be unreasonable to develop a suite of mortality scenarios and responses, many of which may never occur. Developing a set of criteria would require exhaustive discussion of "if/then" scenarios; it would also bind BLM to a set of criteria based on limited data which may not be appropriate. The collection of mortality data and review by the technical committee provides a prudent process for addressing collision-related avian mortality. As stated in the BO, attached to this ROD, mortality of more than one bald eagle or peregrine falcon will be considered unacceptable by USFWS.

ROWs are term, renewable grants. If at the end of the term, monitoring shows impacts continuing to be unacceptable, BLM would not renew the grant.

Comment #7

Commentors contend BLM has failed to consider all reasonable alternatives, specifically:

- alternative sites,
- alternative mitigation measures, and
- alternative timing of project development.

RECORD OF DECISION - SEAWEST/PacifiCorp Windpower Project

Alternative Sites. Commentors make three assertions concerning the failure to analyze alternative sites. 1) Because the top of Foote Creek Rim is apparently a high-use area for raptors, constructing the wind farm away from the ridgetops would represent a reasonable alternative. 2) Alternative sites may have fewer environmental impacts and "BLM should decide whether to issue this permit based on the significance of the impacts, not on the profit margin of the permittee." 3) The FEIS fails to demonstrate that other sites are not feasible.

Response

1. BLM concurs that Foote Creek Rim may be a high-use area for raptors. Where possible, turbine strings were located on top of the rim, away from the areas of highest raptor use. Other siting constraints (e.g., setbacks from cultural resource sites, wind patterns, etc.) precluded avoiding all raptor use areas. However, many of the factors that are thought to contribute to raptor mortality have been eliminated from this project. Perching opportunities will be limited by the use of tubular towers and no above-ground power poles in the wind farm. Slower rotor speeds and upwind turbines are also thought to reduce potential for collision-related mortality associated with other turbine designs. During monitoring, the factors contributing to mortality will be evaluated and appropriate mitigation measures implemented. If the assertion that high-use areas are associated with unacceptable collision-related mortality is found to be accurate, retrofitting and enforcement steps would be taken (as described in Sections 2.1.11 and 8.2.3.4 in the FEIS). Siting facilities off ridgetops would have the same economic consequences as relocating the project (i.e., it would render the project unfeasible); therefore, it is not considered reasonable.
2. NEPA does not require Federal agencies to judge the business decisions of applicants. In 1983 guidance regarding NEPA regulations, CEQ addressed questions concerning an agency's obligation to evaluate alternatives to a proposed action developed by an applicant for a federal permit. The guidance discusses a case in which "the court determined that the U.S. Environmental Protection Agency's (EPA) choice of alternative sites was focused by the primary objectives of the applicant...and that EPA had limited its consideration of sites to only those sites which were considered feasible, given the applicant's stated goals. The court found that EPA's criteria for selection of alternatives was sufficient to meet its NEPA responsibilities." The guidance continues, stating "This decision is in keeping with the concept that an agency's responsibilities to examine alternative sites has always been bounded by some notion of feasibility . . ."
3. Rationale concerning alternatives analyzed in the EIS are discussed in Section 2.4 in the DEIS and Section 8.2.1 in the FEIS. The applicant has documented that placement of this facility at another site in Wyoming would render the project infeasible; analyzing another site or sites in detail would delay the project and would also render it infeasible.

NEPA analysis of coal development projects do not require the developer to consider alternative sites for which they have no financial interest or where the resource is of inferior or unknown quality or quantity and may not meet contract parameters. Similarly, it is not reasonable to require a wind energy company to gather baseline data on such alternative sites. In either situation, however, if development at the site analyzed is shown to have unacceptable adverse impacts, BLM can deny use of Public Land at that site.

Mitigation. Commentors assert that alternative mitigation measures were not considered as required by 40 CFR 1508.25(b)(3).

RECORD OF DECISION - SEAWEST/PacifiCorp Windpower Project

Response

As stated on page 2-36 in the DEIS, "other possible alternatives, including turbine design changes or alternative placement of turbines within the project area, have been incorporated into the proposed action and alternative A." Additional mitigation measures, not included in the proposed action, are included in Section E of this ROD. Because the applicants have agreed to implement all practicable mitigation measures, no substantively different alternatives could be developed.

Timing. Commentors assert BLM should consider an alternative of delaying approval until more information on impacts can be collected. Commentors believe such an alternative is reasonable because, "where a potential jeopardy situation exists for a species' population or sub-population -- or where a violation of law may occur -- the BLM cannot so readily dismiss its information-collection obligations."

Response

Rationale for not considering delaying the project as an independent alternative is presented in response to Comment AL16 (page 8-68 in the FEIS). BLM has previously demonstrated that no jeopardy situation or violation of law exists for Phase I of this project. The assertion that the EIS fails to consider reasonable alternatives has been considered.

October 2, 1995

Walter George, Project Leader
Rawlins District Office
Bureau of Land Management
1300 3rd Street North
Rawlins, WY 82301



Dear Mr. George:

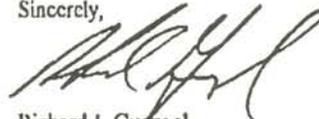
Thank you for the opportunity to review the Final Environmental Impact Statement (FEIS) for the KENETECH/PacifiCorp Windpower Project. I previously provided my personal comments on the draft EIS (DEIS) in an attempt to identify problems and concerns so that the analysis and project could be improved and hopefully result in a better decision. After reviewing BLM's responses to significant issues raised by myself and other commentators about the DEIS (e.g., alternative site locations, adequacy of baseline and monitoring studies, mitigation effectiveness, etc.), I am disappointed BLM did not perform the recommended analyses in a supplemental DEIS. I believe this is a disservice to the public and project proponents. Instead, the FEIS basically maintains the original position of BLM as project facilitator. Most of the changes incorporated in the FEIS are semantic but not substantive. The FEIS indicates that the project sponsor's preferences have unduly influenced the choice of alternatives considered. Redefining the Purpose and Need in the FEIS also appears to be a thinly veiled attempt to avoid serious consideration of the No Action alternative. I am disappointed in the lack of specific, meaningful criteria provided for constraining discretion of the authorizing officer regarding exceptions and waivers of mitigation and other aspects of the FEIS, ROD and PODs. BLM has a poor reputation when it comes to upholding protective measures for wildlife and other natural resources. Political influence often displaces responsible resource management. I have numerous other specific concerns about the FEIS but will reserve them for now. I would be willing to discuss these with BLM.

I strongly urge BLM to reconsider their decision not to fully analyze other sites. The FEIS included information that Foote Creek Rim had the strongest wind resource. However, the real issue was whether or not wind power could be commercially generated at other sites. Since the preparation of the DEIS, economics of wind power generation have changed drastically and the assumed tax credits may not be available for all or part of the project. Prior to a decision, BLM should reevaluate the economics of the project given its significant impacts and uncertainty. Because of the likely change in economic viability, BLM should assure that effective mitigation is guaranteed if the project is approved and that provisions are made to remove structures if the project is abandoned. Also, it seems prudent to delay the decision or implementation of the project pending demonstration of its economic viability and to allow for more and better baseline data to be collected.

Mr. Walter George
KENETECH/PacifiCorp FEIS
October 2, 1995
Page 2

Having reviewed the FEIS, I cannot support the proposed action nor the analysis on which it is based. I urge BLM to reconsider its position not to provide for adequate evaluation and disclosure of alternative sites. I strongly recommend that BLM take adequate time to obtain a suitable baseline and evaluation of alternative sites; to evaluate the viability of the project given updated knowledge and ongoing deliberations about subsidies for the project; and to assure that, if approved, the best project is developed that provides the least impact to other resources. As proposed, many impacts will go undetected or unmitigated, particularly of only Phase I is constructed. It's time for BLM to do the right thing.

Sincerely,



Richard J. Guenzel
4810 Sherman Hill Rd. #C
Laramie, WY 82070

RECORD OF DECISION - SEAWEST/PacifiCorp Windpower Project

Response to Comments from Richard J. Guenzel

Mr. Guenzel's comments can be summarized as follows:

1. Failure to prepare a supplemental EIS to evaluate "alternative sites locations, adequacy of baseline and monitoring studies, mitigation effectiveness, etc."
2. Lack of specific criteria for "constraining discretion of the authorizing officer regarding exceptions and waivers of mitigation and other aspects of the FEIS, ROD, and PODs",
3. Failure to give serious consideration to the No Action Alternative.
4. Failure to analyze alternative sites.
5. Failure to obtain adequate baseline data.
6. Need to reevaluate the project's economic feasibility.

Response

Comments 1, 4, and 5 reiterate comments made on the DEIS. These issues were discussed in Sections 8.2.11 (need for a supplemental EIS), 8.2.4 (adequacy of baseline data), 8.2.3 (adequacy of monitoring program), 8.2.5 (mitigation), and 8.2.1 (alternative site analysis), in the FEIS.

Comment 2. The BLM is committed to collecting the maximum amount of baseline data from Simpson Ridge prior to issuing an NTP for future Simpson Ridge phases. The AO's discretion to modify this commitment is explained in BLM's response to WGFD Comment #2 (see below). In the response to Comment AE55 in the FEIS (page 8-54), BLM makes the commitment to consult with WGFD prior to authorizing construction within restricted wildlife habitat during otherwise restricted periods. On page 8-16 in the FEIS, BLM states that "the technical committee would act in concert with the BLM IDT, advising the BLM AO throughout the authorizing process for each phase." These statements clearly demonstrate BLM's commitment to consult with wildlife experts outside of BLM before allowing exceptions to the stipulations and mitigation measures promulgated in the EIS, the ROD, and the PODs.

Comment 3. The No Action Alternative was considered. BLM's responses to Comment Nos. 1 and 5 from Biodiversity Associates/Friends of the Bow (see above) explains BLM's position that anticipated impacts from Phase I will not be so severe as to warrant denial of the ROW grant and the NTP for Phase I.

Comment 6. The 1.5 cent/kWh production tax credit for wind-generated electricity has not been repealed by Congress. Therefore, the project economics are as described in the DEIS and FEIS.



STATE OF WYOMING
OFFICE OF THE GOVERNOR

JIM GERINGER
GOVERNOR

October 2, 1995

STATE CAPITOL BUILDING
CHEYENNE, WY 82002

WYOMING
GAME AND FISH DEPARTMENT

Jim Geringer, Governor



John Tallott, Director

September 25, 1995

EIS 7485
Bureau of Land Management
Rawlins District Office
Final Environmental Impact
Statement
Kenetech/PacificCorp
Windpower Project
SIN: 94-010
Carbon County

Walter George, Project Leader
Rawlins District Office
Bureau of Land Management
1300 3rd Street North
Rawlins, WY 82301



Dear Mr. George:

On behalf of the State of Wyoming, please be advised that we have reviewed The Kenetech/PacificCorp Windpower Project Final Environmental Impact Statement and we encourage the work to move forward. In accordance with our own comment period given to all affected state agencies, I have attached comments from the Game and Fish Department for your review. While, in general, the State of Wyoming is supportive of this renewable and innovative energy project, I ask your serious consideration of the past and continuing concerns of the Game and Fish Department.

Thank you for the opportunity to comment on this study and I look forward to the progress of this project.

Sincerely,

Jim Magagna
Director of Federal Land Policy

JM:jh
Enclosures

WYOMING STATE CLEARINGHOUSE
OFFICE OF FEDERAL LAND POLICY
ATTN: JULIE HAMILTON
HERSCHLER BUILDING, 3W
CHEYENNE, WYOMING 82002

Dear Ms. Hamilton:

The staff of the Wyoming Game and Fish Department has reviewed the Final Environmental Impact Statement for the Kenetech Wind Energy Development Project on the Rawlins District. We offer the following comments for your consideration.

The FEIS includes responses to WGFD comments on the DEIS. Sections 3.2.2 (Affected Environment, Wildlife and Fisheries) and 5.1.1 (Mitigation and Monitoring Introduction) have been completely re-written. WGFD comments on the comment responses and re-written sections are below. The method of response used to address our concerns was extremely difficult to follow. We request to the extent reasonable that future responses to our comments be made directly rather than by referral to several different documents, and other comment responses. If, in the following comments, we do not re-address previous comments (3/17/95), then BLM's response adequately addressed our concern. We believe any remaining concerns should be addressed by BLM before the Decision Document is approved.

1. RE: Comment 1, (Alternative Analysis) and Comment 7, (Description of Wind Resource). A cost-benefit analysis has been provided as requested in our initial comments. However, 40 CFR 1502.33 stipulates, "If a cost-benefit analysis relevant to the choice among environmentally

different alternatives is being considered for the proposed action, it shall be incorporated ... as an aid in evaluating the environmental consequences." BLM has indicated that insufficient meteorological and economic data exist for reasonable consideration of alternative sites (Section 8.2.1.1, page 8-9). Therefore, adequate cost-benefit analyses for all alternatives have not been conducted. On page 8-9 BLM states that it would not be feasible to collect the additional meteorological data necessary to determine wind potential of alternative sites. We reiterate that BLM should consider alternative areas for windpower development based on environmental consequences and cost-benefit analyses.

- 39
2. RE: Comment 2, (Baseline Wildlife Information) and Comment 22, (Impact Assessment). BLM has not addressed the initial comments. WGFD acknowledges that direct impacts to wildlife as a result of windplant activity cannot be completely understood until the plant is functional. However, determination of actual impacts cannot be accomplished when baseline data are insufficient to accurately characterize wildlife populations or the environment to be affected prior to windplant construction. WGFD agreed with the waiver requested by Kenetech that allows development of Phase I without further baseline data collection, as long as at least 3 years of baseline data were collected for all other phases of the windplant. Retaining BLM AO discretion to curtail or modify monitoring and baseline data collection violates this agreement, and may compromise the ability of the interdisciplinary team to accurately assess actual wildlife impacts as a result of windplant construction and operation. We request a firm commitment from the BLM to honor this agreement to initiate the wildlife monitoring program commencing at least 3 years prior to the initiation of all subsequent phases.
 3. RE: Comment 3, (Prediction of Wildlife Impacts). We were unable to find the referenced text in Appendix B.
 4. RE: Comment 4, (Mitigation). Mitigation measures have not been included as required by NEPA [40 CFR 1502.14 (f), 40 CFR 1502.16 (h), 40 CFR 1502.3].
 5. RE: Comment 5, (Displacement Effects). We were unable to locate the referenced change on page vi of the Executive Summary.

6. RE: Comment 13, (Displacement Effects). The response does not provide sufficient information to determine if changes adequately address the comment.
7. RE: Comment 14, (Cumulative Impacts). WGFD was unable to locate the referenced Appendix B text change.
8. RE: Comment 15, (Baseline Information from Simpson Ridge). Since development of an adequate environmental analysis, and possibly windplant construction, for the Simpson Ridge area is contingent on results of Phase I, Phase I should be considered an independent alternative (40 CFR 1502.9). Subsequent phases must include a complete NEPA analysis.
9. RE: Comment 16, (Discretion to Alter Information Requirements). WGFD was unable to locate the referenced Appendix B text change. Additionally, BLM should identify what situations for which exceptions may be granted.
10. RE: Comment 17, (Avian Task Force). Relevant information and results of the Avian Task Force's May 25, 1995 meeting need to be provided prior to project approval to allow public review of the proposed monitoring plan.
11. RE: Comment 19, (Powerline Impacts). BLM should provide the requested information regarding compensation of impacts to wetlands due to powerline construction. The POD for Phase I did not discuss potential impacts to wetlands due to powerline construction. Additionally all powerlines associated with Phase I are not on the Exhibits. Without this information, it is not possible to determine whether powerline construction may impact wetlands.
12. RE: Comment 20, (BLM Reclamation Policy). The referenced change of BLM reclamation policy was not found in Section 8.2.5, nor does the BLM response address WGFD concerns with off and on-site mitigation.
13. RE: Comment 21, (Project-Wide Mitigation). The information in Section 8.2.5 does not adequately address WGFD's original comment. Specifically, neither the DEIS or FEIS defines an adequate, dependable process which assures mitigation will be implemented.
14. RE: Comment 23, (Mitigation of Impacts to Avian Species),

Comment 52, (Siting Considerations to Minimize Impacts to Raptors), Comment 89, (Plan to Minimize Raptor Impacts, and Comment 112, (Turbine Placement). The most recent recommendations from the Avian Task Force should be incorporated in the Decision Document. Additionally, the overlay provided does not indicate that location of wind turbine strings minimizes potential conflicts with high raptor or mountain plover use areas. In fact, one string (west side of Foote Creek Rim, section 7) is planned to intercept an area of consistent raptor use, and another crosses an area of high mountain plover use. Additionally, no off-site mitigation has been proposed.

15. RE: Comment 24, (MBTA Takings). BLM states that USFWS requirements have not been identified. These requirements should be incorporated into the Decision Document once identified. BLM states that efforts already made to reduce mortality are sufficient to qualify any raptor mortality due to wind turbine collision as unintentional. WGFD agrees with this to a limited extent. However, consistent mortality at a particular tower, with no mitigative actions taken, may be interpreted as intentional takings. BLM should provide a commitment to identify and, if necessary, relocate or dismantle individual turbines that result in high raptor mortality.
16. RE: Comment 27, (Collection Lines). WGFD encourages Kenetech to install raptor guards during construction as a pro-active approach to prevent potential problems with raptor collisions. These fixtures are very inexpensive and effective, and have been proven to significantly reduce raptor collisions with power lines.
17. RE: Comment 28, (Winter Range Exclusion). "Certain areas" were not defined or delineated on a map as requested.
18. RE: Comment 29, (Powerline Construction). Exhibits in the POD for Phase I do not illustrate all powerlines associated with this project. Without this information, it is not possible to determine whether powerlines will be routed to avoid grouse leks, raptor nests, wetlands, or other sensitive habitats.
19. RE: Comment 30, (Raptor Nest Protective Buffers). Data from

1995 should be analyzed and included in the Decision Document. BLM should justify eliminating a third year of data collection.

20. RE: Comment 33, (Exceptions to Construct within Sensitive Resource Areas) and Comment 113, (Construction in Sage Grouse Nest Habitat). WGFD acknowledges BLM as the primary land management agency in the KPPA. However, WGFD also has lands within the KPPA and is responsible for wildlife management in the entire KPPA. Any decision by the AO regarding changes to criteria in permitting activities during restricted periods must be made in consultation with the WGFD. BLM must provide this commitment.
21. RE: Comment 34, (Alternative A), Comment 35, 3/17/95, (Environmental Costs), and Comment 36, 3/17/95, (Alternatives Considered but Rejected). Alternatives were selected on the basis of cost-benefit analysis, and not on environmental effects as required by NEPA. See comment 1.
22. RE: Comment 37, (WGFD Clearance). As stated on page 8-12, "Based on review of extant data, WGFD did not recommend avoiding or excluding portions of Foote Creek Rim or Simpson Ridge areas." WGFD neither endorsed or opposed the Foote Creek Rim site since wildlife data had not been collected at the time referenced by BLM. We request this wording be changed, and that BLM acknowledge that insufficient data were available to make any recommendation at the 1992 meeting with Mr. Petera and Dr. Collins.
23. RE: Comment 38, (Impact Categories) and Comment 63, (Swift Fox). BLM should commit to surveys for swift fox and identify mitigation if appropriate.
24. RE: Comment 41, (Baseline Wildlife Information). See comment 2 of this letter. WGFD also requests a copy of the Biological Assessment, and adequate time for review prior to the final decision of the BLM AO.
25. RE: Comment 42, (Vegetation Baseline Data). The proposal to complete mapping in future PODs does not fulfill data collection and analysis required to characterize resources affected by this NEPA action and to support mitigation alternatives. The BLM's response of "no other resource was analyzed in this detail" is inappropriate. Lack of this analysis also does not fulfill requirements of NEPA.

- 17
26. RE: Comment 43, (Wetlands Composition) and Comment 74, (Wetland Delineation). The requested information characterizing wetland types, potential impacts, and mitigation should be provided before approval of the Decision Document.
 27. RE: Comment 49, (RRTAC Review). Please provide verification that the BLM has submitted the requested material for technical review by RRTAC. Results should be provided before project approval.
 28. RE: Comment 55, (Raptor Breeding Territories) and Comment 94, (Mountain Plover Distribution). If there is insufficient data available to determine raptor population parameters and mountain plover distribution on the KPPA, more baseline data is obviously needed. BLM must ensure adequate data is collected for all subsequent phases to characterize these populations in the KPPA area, and to identify potential impacts. See comment 2.
 29. RE: Comment 56, (Raptor Data Reporting) and Comment 57, (Raptor Data Analysis). BLM should re-calculate production as requested in WGFD original comment.
 30. RE: Comment 58, (Effectiveness of 1994 Raptor Nest Searches). Although discussion concerning temporal variation in raptor reproductive effort has been added, no discussion concerning biases due to sampling time has been included.
 31. RE: Comment 64, (Analysis of Use by Endangered Species). The lack of sufficient data does not allow accurate analysis of current endangered species populations or prediction of potential impacts. Please see comment 2.
 32. RE: Comment 66, (Merlins). WGFD requests that future raptor nest surveys include surveys for merlin nests.
 33. RE: Comment 67, (Visual Resource Impacts to Wildlife Recreational Users). WGFD accepts BLM's conclusion on determination of visual impacts. However, we request written acknowledgement that wildlife recreation users will also experience visual resource impacts.
 34. RE: Comment 68, (Impacts Analysis). The response clearly

reflects the lack of adequate baseline data to approximate cumulative impacts. The cumulative impacts analysis only considers southern Wyoming. Given the ability of migratory birds to travel thousands of miles, the selected level of analysis seems inappropriate. BLM must address migration, and potential impacts on bird populations outside southern Wyoming.

35. RE: Comment 69, (Executable Mitigation) and Comment 107, (Construction in Crucial Winter Range). We disagree with the interpretation of NEPA requirements provided in the response. Review of 40 CFR 1502.14(f) and 1502.16(h) clearly indicate that appropriate mitigation measures must be included in the EIS.
36. RE: Comment 70, (Significance Thresholds). BLM should provide mitigation plans for impacts to crucial winter range and other important wildlife resources as originally requested.
37. RE: Comment 71, (Achievable Mitigation). BLM should provide a response addressing lack of off-site mitigation on impact analysis and reasonable measures to mitigate adverse impacts.
38. RE: Comment 73, (Revegetation Species). If non-native species are used as a last attempt for soil stabilization, BLM should provide a commitment that these species will be eliminated following establishment of native species.
39. RE: Comment 75, (Big Game Significance Criteria) and Comment 76, (Impacts to Winter/Yearlong Ranges). While the WGFD supports the conclusions of this analysis, we disagree with the utilization of 1% due to the lack of biological data to support this criterion. Also, mitigation for known habitat losses should be presented, along with a range of proposed mitigation for other, predicted losses.
40. RE: Comment 77, (Cumulative Impacts to Big Game). WGFD disagrees with the interpretation and procedures used to determine cumulative impacts to big game in the DEIS because of the lack of biological rationale and adequate baseline data. We do agree that the impacts will be significant, and request BLM acknowledge that continued incremental impacts to big game ranges will have an increased negative influence to big game populations.

- 42
41. RE: Comment 78, (Prediction of Impacts to Pronghorn). WGFD disagrees and feels analysis of impacts to pronghorn antelope is inadequate. Data must be collected to assist in determination of impacts.
 42. RE: Comment 79, (Studies of Medicine Bow Wind Towers). BLM should include observations from wind plant operators in Montana.
 43. RE: Comment 81, (Prediction of Impacts to Mule Deer), Comment 82, (Impacts to Migratory Mule Deer) and Comment 83, (Big Game Movement Through Strings). We appreciate the clarification on fencing plans. However, WGFD feels analysis of impacts to mule deer is inadequate. Data must be collected that will assist in determination of impacts.
 44. RE: Comment 90, (Raptor Mortality Predictions). BLM should identify the referenced assumptions in their response. Also BLM should clarify if the statement regarding applicability of scavenging and observer correction factors applies to California or Wyoming windplants. Will scavenging and observer correction factors be incorporated in the estimation of raptor mortality in the KPPA if found to be significant?
 45. RE: Comment 91, (Criteria for Raptor Population Studies), Comment 95, (Passerine Impact Criteria), Comment 96, (Passerine Mitigation Criteria), and Comment 101, (Mountain Plover Mitigation Criteria). Although development of specific criteria may not currently be possible, general criteria can be developed. BLM should identify what constitutes a negative impact.
 46. RE: Comment 92, (Take Permits). USFWS decisions should be included in the Decision Notice.
 47. RE: Comment 97, (Amphibian and Reptile Impact Criteria). BLM has not responded to the concerns raised in the original comment.
 48. RE: Comment 98, (Peregrine Falcons). The inability to determine if the KPPA (specifically Foote Creek Rim) is a migration corridor for peregrine falcons reflects the inadequacy of the baseline data. Also. see comment 2.

49. RE: Comment 103, (Impacts to Land Use). The requested information has not been collected or included in the FEIS. Without this baseline information, the impact of wind turbines on wildlife-based recreation cannot be determined, limiting opportunity for development of proper mitigation. BLM's statement that only minimal impacts to public recreation would occur as a result of windplant development is unsubstantiated. BLM should provide enforceable commitments to monitor wildlife-related recreational impacts, and to mitigate any impact detected.
50. RE: Comment 104, (Executable Mitigation), Comment 105, (Executable Mitigation), and Comment 116, (Mitigation for Impacts to Recreation). WGFD disagrees with BLM's interpretation of NEPA (See comment 38). The ability of decision-making authorities to determine actual effects of windplant generation on environmental resources is limited if mitigation for potential losses is not described. Any decision on the FEIS may be incorrect if not based on all available information.
51. RE: Comment 111, (Lead Time for Raptor Mitigation). The last sentence of the response is unclear. What is meant by "unless situations offer for which exceptions may be granted"? Also, we were unable to locate the 3 year commitment in Appendix B of the FEIS. Please see comment 2 of this letter.
52. RE: Comment 115, (Impacts to Mountain Plovers). BLM has not addressed diminished habitat effectiveness and subsequent mitigation for mountain plovers as requested in the original comment.
53. RE: Comment 118, (Appendix B. Monitoring Lead Time). While BLM has adequately addressed most of the concerns raised in the original comment, they have not provided a clarification for sampling time as requested.
54. RE: Comment 119, (Weight of Evidence). We were unable to find Table 8.3 that was referenced in the response.
55. RE: Comment 120, (Pronghorn Survey Protocol). We were unable to find the text changes in Appendix B that were referenced in BLM's response.
56. RE: Comment 121, (Pellet Counts). Several questions posed

in the original comment have not been addressed. Have pellet counts worked elsewhere in determining population size and density? Will monitoring personnel remain constant so that observations of pronghorn antelope in the area will be consistent? Were the assumptions of this technique evaluated for this project?

- 43
57. RE: Comment 122, (Carcass Searches). The response still violates the agreement made in the 11/5/94 draft monitoring protocol.
58. RE: Comment 123, (Scavenger Trials). BLM has not addressed WGFD concerns regarding types of carcasses as requested in our original comment. Also, BLM should identify what types of initial monitoring results would warrant replication for scavenging trials within a year.
59. RE: Comment 124, (Raptor Monitoring). WGFD did not recommend a reference area for raptor monitoring purposes. However, this does not imply that we approved the selected area. Both the WGFD and Kenetech's consultant (D. Strickland, pers. commun.) agree the Shirley Mountain reference is unacceptable due to significant differences in habitat, wind patterns, and species occurrence.
60. RE: Comment 125, (Non-Breeding Passerine Surveys). BLM should clarify how levels of mortality during the non-breeding season can be evaluated, or determined as substantial if no non-breeding surveys are planned.

Comments concerning revisions of Sections 3.2.2 (Affected Environment, Wildlife and Fisheries) and 5.1.1 (Mitigation and Monitoring Introduction):

61. RE: Construction. Construction is currently planned for April through September, with road construction commencing in the winter of 1995-1996. Construction during these time frames may significantly disturb wildlife during parturition and incubation. For example, several mountain plover pairs nested on Foote Creek Rim during 1994. While BLM has committed to a protective buffer around known nests, mountain plovers may be precluded from nesting in the area by construction activities. These concerns should be addressed and suitable mitigation for displacement of wildlife due to construction identified.

62. RE: Selection of Alternative Transmission Route. BLM has indicated that alternative transmission route # 3 is the preferred alternative. Section 3.2.2 indicates this alternative may have the largest negative impact on wildlife resources. Alternative 3 passes through pronghorn antelope crucial winter range (p 3-7), has the largest number of known raptor nests within 2 miles (p 3-41), and intercepts the greatest amount of probable sage grouse nesting habitat of all three alternatives (p 3-46). BLM should provide the rationale for selecting this transmission route as the preferred alternative, considering its environmental impacts.
63. RE: Negligible Impacts. Table 2.11 identifies 715 acres of habitat degradation as negligible for wildlife. WGFD does not concur with this conclusion, particularly when considered with other developments in this area. Also, habitat effectiveness of reclaimed surfaces, and areas around wind turbines have not been addressed. BLM should implement a big game monitoring program and assure that impacts to habitat effectiveness are mitigated.
64. RE: Raptor Nesting Data Collection. On page 3-43 the FEIS states "...the 1994 raptor nest survey and monitoring is the first complete record of raptor nesting activity for the proposed development area." WGFD disagrees with this statement. While the study is the first for this area, survey dates were insufficient to detect all potentially active nests. Surveys for active raptor nests typically begin in February (golden eagles and owls) and extend through July. Initiating surveys in late June and mid-July can result in misclassification of nesting activity for nests from which chicks have already fledged, and may totally miss earlier nesting activities.
65. RE: Goshawks. WGFD encourages the BLM to contact Dr. John Squires of the USFS Research Station in Laramie. Dr. Squires has collected data on goshawks on the Medicine Bow Forest indicating extensive foraging use of open grasslands and sagebrush, and limited wintering use of the same types of areas. The BLM should incorporate this information to determine potential impacts of windplant development on this species.
66. RE: Monitoring as Mitigation. WGFD has agreed to

Ms. Julie Hamilton
September 25, 1995
Page 12 - EIS 7485

monitoring studies for a minimum of 3 years to provide baseline data for later phases of the project. While this data will be helpful in determining mitigation, we do not concur that monitoring is mitigation (p 5-3). The CEQ definition of mitigation does not include monitoring. Monitoring is a means to identify mitigation needs.

Thank you for the opportunity to comment.

Sincerely,



JOHN BAUGHMAN
ACTING DEPUTY DIRECTOR

JB:TC:as
cc: Wildlife Division
USFWS

RECORD OF DECISION - SEAWEST/PacifiCorp Windpower Project

Response to Comments from the Wyoming Game and Fish Department (WGFD)

BLM had classified WGFD comments (66 in total) into four categories for the purpose of addressing protests to the proposed decision.

The following comments requested information or clarification be provided in the ROD: 3, 5-7, 9-11, 14, 15, 17, 18, 26, 27, 29, 30, 36, 38, 39, 42, 44-46, 48, 51-56, 58, 60-62.

The following comments stated an opinion: 4, 8, 13, 16, 59, 64, 66.

The following comments objected to the project or a specific project feature. BLM provided a positive response to comments: 20, 33, 40, 47.

The following comments objected to the project or a specific project feature. BLM was unable to respond or address the concern in an affirmative manner: 1, 2, 12, 19, 21-25, 28, 31, 32, 34, 35, 37, 41, 43, 49, 50, 57, 63, 65.

Comment #1 The rationale for not analyzing alternative locations for the proposed project is presented in Section 8.2.2 in the FEIS. BLM considered the following factors during this evaluation:

- economic feasibility of other locations,
- results of initial site screening for serious concerns at the proposed site,
- practicality of completing an environmental analysis of alternative locations,
- proportion of Federal land in the project area and existing agreements with private landowners, and
- Federal policy on development of renewable energy resources.

Based on consideration of these factors (Sections 8.2.2.1 - 8.2.2.5 in the FEIS), BLM determined that alternative sites would not be analyzed in detail.

Comment #2 Section 8.2.3.3 in the FEIS clearly states that the AO would work in concert with the technical committee throughout the authorizing process for each phase. Page B-1 in the FEIS states BLM's commitment to monitor proposed development areas prior to issuing an NTP for future phases. Specifically, the language in Appendix B (page B-6, paragraph 2, line 5 in the DEIS) has been changed in the FEIS to state:

"Future development in the Simpson Ridge area will be monitored at least three years prior to **issuing an NTP** [emphasis added]. However, if KENETECH determines that wildlife, public recreation, or cultural resource concerns at Foote Creek Rim are substantial enough to avoid, then KENETECH may apply for a BLM NTP for the Simpson Ridge area. The application shall thoroughly document the reasons development cannot proceed on Foote Creek Rim."

The wildlife monitoring program was initiated in the Foote Creek Rim and Simpson Ridge project areas and the Laramie Range reference area in March 1995, suspended in March 1996, and restarted in February 1997.

The AO has the discretion to modify this requirement if a preponderance of evidence demonstrates that more data collection is unnecessary; the technical committee will be responsible for weighing the evidence and advising the AO (see Section 8.2.3.3 in the DEIS) prior to making any decisions.

Comment #3 The reference to text in Appendix B refers to the commitment to collect Simpson Ridge baseline data prior to issuing an NTP for future Simpson Ridge phases (see response to Comment #2).

RECORD OF DECISION - SEAWEST/PacifiCorp Windpower Project

Page 2-8 in the FEIS describes BLM's authority to require retrofit of prior phases should wildlife or other concerns be borne out, "retrofit of prior phases could include but is not limited to relocating turbines, painting blades, and installing warning devices. If the operations of the project causes an asserted violation of Federal law (e.g., MBTA, ESA, or BEPA) the USFWS (in conjunction with other Federal agencies) can initiate legal proceedings to enforce the provisions of such law." In addition, ". . . if project operations cause a violation of stipulations promulgated in the ROW grant, BLM may require KENETECH to take measures to correct the violation and may revoke the ROW grant for use of Public Land if KENETECH fails to correct the violation."

Comment #4 Mitigation measures, including mitigation not already included in the proposed action or alternatives, are included in Sections 2.1.11 and Chapter 5.0 in the DEIS and FEIS. In addition, Section E (Mitigation and monitoring) of the ROD includes additional mitigation measures.

Comment #5 The referenced change is on page viii of the Executive Summary. The page referenced in the FEIS is in error.

Comment #6 In their comments on the DEIS, WGFD requested that we footnote Table 2.1 to clarify that the disturbance acres presented in the table does not account for wildlife displacement or loss of habitat function. On page 2-1 in the FEIS the following footnote was added to Table 2.1: "At this time, the BLM is unable to quantify displacement effects or loss of habitat function from project activities. Monitoring studies are designed to detect gross changes of habitat use around wind farm facilities. The need for mitigation tied to displacement will be addressed in environmental analysis for subsequent phases."

Comment #7 The text change is located on page B-1 in the FEIS. This issue is discussed in detail in response to Comment #2.

Comment #8 BLM's response to Comment AE31 (on page 8-53 in the FEIS) describes the rationale for not analyzing Phase I as an independent alternative. Pursuant to NEPA, because Phase I is an integral part of the proposed action, it need not be considered as an independent alternative (*Environmental Defense Fund Inc. v. Costle*, D.C. Cir. 1981, 657, F.2d, 275). Section 8.2.6 in the FEIS states that complete NEPA analyses will be completed for each subsequent phase of development.

Comment #9 The requested text change is located on page B-1 in the FEIS. Response to Comment #2 discusses this issue.

Comment #10 The purpose of KENETECH's Avian Task Force is to conduct research on the interaction of birds with KENETECH's wind turbines at Altamont Pass, California. This research was reviewed in the preparation of this EIS and relevant information incorporated. The Avian Task Force does not officially comment on EISs. No relevant discussion about this EIS occurred at the Task Force's May 1995 meeting. The Task Force was discontinued following KENETECH's bankruptcy.

Comment #11 The POD for the 230-kV power line addresses impacts to wetlands and mitigation measures; this POD was supplied to WGFD on October 18, 1995. There are no above-ground powerlines in the wind farm. The SeaWest POD was provided to WGFD in April, 1997.

Comment #12 BLM policy on off-site mitigation is discussed on page 8-21 in the FEIS. BLM policy does not prevent an applicant from agreeing to off-site mitigation at their own discretion.

Comment #13 Sections 8.2.5 and 8.2.6 in the FEIS state that:
executable mitigation for anticipated impacts have been included in the proposed action;

RECORD OF DECISION - SEAWEST/PacifiCorp Windpower Project

- as more data are collected, it may be possible to develop additional mitigation measures for impacted resources;
- as the project proceeds, deficient mitigation measures would be modified;
- the monitoring and subsequent phase analysis will allow identification of unanticipated impacts and implementation of appropriate mitigation measures; and
- for uncertain impacts, rather than developing a suite of potential measures, BLM is proposing a phased development with NEPA analysis prior to approval of each phase.

BLM believes that this process will provide a quick and responsive methodology to address unexpected project impacts, as appropriate.

Comment #14 The Avian Task Force has endorsed a blade pattern, tubular towers to eliminate perching, and variable speed turbines (e.g., slower blade speeds pose a lower risk to birds) as reasonable measures to reduce avian mortality. These were confirmed as the most recent Task Force recommendations by personal communication on October 10, 1995 with Dr. Richard Curry, Director of Environmental Research, KENETECH Windpower, a Task Force member.

BLM concurs that the west edge of Foote Creek Rim may be a high-use area for raptors. Where possible, turbine strings were located on top of the rim, away from the areas of highest raptor use. Other siting constraints (e.g., cultural resource setback requirements, wind patterns, etc.) precluded avoiding all raptor and mountain plover use areas. However, many of the factors that are thought to contribute to raptor mortality have been eliminated from this project. Perching opportunities will be limited by the use of tubular towers and no above-ground power lines in the wind farm. Slower rotor speeds and upwind turbines are also thought to reduce potential for collision-related mortality. During monitoring, the factors contributing to mortality will be evaluated and appropriate mitigation measures implemented.

The effects of disturbance on mountain plover habitat effectiveness may be adverse or beneficial. Mountain plovers have been observed nesting within or immediately adjacent to human disturbances and may be attracted to these areas [Parrish, T.L., S.H. Anderson, and W.F. Oelklaus. 1993. Mountain plover habitat selection in the Powder River Basin, Wyoming. *Prairie Naturalist* 25(3):219-226.]. Turbine setback requirements necessitate placing turbines on the east edge of the rim. Mountain plover use will be monitored. If the development is shown to have an adverse impact on mountain plovers (as determined by the technical committee, BLM, or the USFWS), appropriate mitigation measures will be implemented.

Comment #15 A Special Purpose Permit has been issued by USFWS. Carcass searches will identify facilities that cause bird mortality and their location. This information will be evaluated by the technical committee which will make recommendations to the AO for appropriate corrective actions. Relocation of offending turbines is only one option that may be considered.

Comment #16 SeaWest is not proposing above-ground powerlines in the wind farm.

Comment #17 "Certain areas" is used in the RMP to refer to areas within crucial winter range. Crucial winter ranges are delineated on maps in Section 3.2.2.1 in the DEIS and FEIS.

Comment #18 The POD was provided to WGFD in April 1997. There are no above-ground power lines in the wind farm.

Comment #19 1995 raptor nest data were considered in the Comparison report. These data were provided to WGFD on July 28, 1995. WGFD has agreed that Phase I may proceed without three years of baseline data.

RECORD OF DECISION - SEAWEST/PacifiCorp Windpower Project

Comment #20 This commitment is made in BLM's response to Comment AE55 in the FEIS.

Comment #21 On page 8-12 in the FEIS, BLM provides justification that a full range of reasonable alternatives was considered. See response to Comment #1.

Comment #22 The comment refers to language in a preliminary version of the FEIS. The quotation is on page 8-8 of the FEIS and states: "Based on review of extant data, WGFD made no recommendations concerning avoiding or excluding portions of the Foote Creek Rim or Simpson Ridge areas." The language used in the preliminary final EIS, which was provided for WGFD review, was revised as requested before the FEIS was released to the public.

Comment #23 As stated on page 4-65 in the DEIS, swift fox are expected to be infrequent visitors to the KPPA, and it is unlikely that project development will adversely impact this species; therefore, it is not reasonable to conduct surveys for swift fox.

Comment #24 The Biological Assessment was provided to the Game and Fish Department on April 5, 1995.

Comment #25 The level of detail contained in the FEIS is commensurate with the phase of development and the level of concern for the vegetation resource. Section 3.2.1 provides a general description of vegetation within the KPPA and a specific vegetation map and detailed acres for the Phase I area. Site-specific vegetation data will be collected for subsequent phases as they are proposed and included in future NEPA documents.

Comment #26 Wetland delineations within the Phase I area were completed in July 1995. Results were provided to the U.S. Army Corps of Engineers (Corps) for verification. Less than 0.1 ac of jurisdictional wetlands would be disturbed due to Phase I development; therefore, no mitigation would be required. The wetlands report and Corps verification letter are available from the BLM. The Corps has also been notified that, because this is a phased project, cumulative disturbance of wetlands will possibly necessitate development of a wetland mitigation plan. Pursuant to Section 404 of the Clean Water Act (33 U.S.C. Section 1251-1376), the Corps will be consulted prior to any surface disturbance in potential wetlands to determine permitting and mitigation requirements.

Comment #27 Dr. Mark Fuller, Director of the Raptor Research and Technical Assistance Center was a member of KENETECH's Avian Task Force. Because of Dr. Fuller's role in these two groups, the Center was not specifically contacted for comments on the EIS.

Comment #28 Section 8.2.4 in the FEIS describes BLM's rationale for not requiring extensive baseline data collection. See response to Comment #2.

Comment #29 BLM concurs that because the 1994 helicopter surveys were conducted in the last week in May and the first week in June, early nesting attempts and failures were probably missed and this may bias the results. Helicopter surveys were scheduled to optimize the amount of data collected with the financial resources available; once the aerial surveys were completed, active nests of every raptor species within and adjacent to the KPPA were monitored until young either fledged or failed. The 1994 data, therefore, provide valuable estimates of nestling productivity and fledgling success for all raptor species within the KPPA.

Comment #30 See response to Comment #29. The sampling time in the Monitoring Protocol was established by WGFD.

Comment #31 Section 8.2.4 in the FEIS describes BLM's rationale for not requiring extensive baseline data collection. See also response to Comment #2.

RECORD OF DECISION - SEAWEST/PacifiCorp Windpower Project

Comment #32 During development of the monitoring program, WGFD as well as other agency specialists were consulted to determine the species of concern within the KPPA. Merlins were not identified as a species of concern; therefore, it is not reasonable to specifically survey for merlin nests. Merlin nests will be documented if detected during searches for other nests.

Comment #33 In Section 8.5.2.5 in the DEIS, which is the section describing impacts on recreation, BLM states: "Construction, noise, dust, traffic, the presence of equipment, and associated human activity would change the character of the area and recreational experiences, such as backcountry hiking and camping, wildlife observation, horseback riding, nature photography and ORV use" Later, in the same paragraph, BLM states: "Because visual impacts will be significant in some areas (see Section 4.6), the aesthetic sense of a rural, undeveloped recreational area would be greatly reduced." BLM concurs that wildlife recreation users will experience visual resource impacts.

Comment #34 BLM's response to WGFD Comment AE94 provides BLM's rationale for the selected cumulative impact analysis area. Furthermore, to address impacts on migratory birds, radiotelemetry or satellite telemetry studies would be needed; WGFD has stated that marking birds, especially sensitive species, is not necessary unless the variables being monitored indicate that the wind farm may be having a substantial effect on one or more populations (personal communication, September 1994, with Bob Oakleaf, Nongame Coordinator, WGFD).

Comment #35 BLM acknowledges WGFD's opinion concerning mitigation. BLM's position concerning mitigation is stated in Section 8.2.5 in the FEIS.

Comment #36 Mitigation measures are described in Section 2.1.11 and Chapter 5.0 in the DEIS, Chapter 5.0 in the FEIS, Section E in the ROD, and in the POD for Phase I. All reasonable measures to mitigate impacts have been identified and will be implemented.

Comment #37 See response to Comment #12.

Comment #38 BLM will consider removal of non-native species if their removal would not cause substantial site disturbance.

Comment #39 On page 8-25 of the FEIS, BLM states "Although BLM has no scientific evidence to demonstrate that a loss of 1% of crucial habitat will result in a significant impact to any species, this threshold was used as a prudent measure to judge potential project impacts." We acknowledge that WGFD disagrees with this criterion. However, by using this criterion in this analysis, BLM determined that significant cumulative impacts to big game crucial ranges have already occurred within the cumulative impact analysis area, and that this project would contribute to this significant impact. Therefore, by using this criterion, impacts to these ranges were given the greatest weight possible (significant) as a result of the NEPA analysis. "For the proposed project, the 1% criterion affords big game species the greatest level of consideration (FEIS, page 8-25)."

Known habitat losses, presented as the amount of acreage disturbed during construction and for the LOP in Table 4.10 in the DEIS, are anticipated to be negligible to moderate, depending on species; therefore, no mitigation measures are proposed.

Comment #40 BLM acknowledges that continued incremental impacts to big game ranges may have increased negative influence to big game populations.

RECORD OF DECISION - SEAWEST/PacifiCorp Windpower Project

Comment #41 During monitoring, data will be collected to assist in the evaluation of impacts to pronghorn antelope, mule deer, and elk (see Appendix B in the DEIS). Section 8.2.4 in the FEIS describes BLM's rationale for not collecting more baseline data prior to authorizing the project.

Comment #42 BLM's response to WGFD Comment AE108 in the FEIS presents the only known available information concerning big game at the wind farm near Livingston, Montana.

Comment #43 See response to Comment #41.

Comment #44 The assumptions and possible large errors associated with the mortality estimates are described on pages 4-48 through 4-53 in the DEIS. The data from California are the only large-scale wind farm mortality data available from which to make even a crude estimate of potential mortality at the Wyoming wind farm. Because BLM is aware of the extreme biases in this type of estimate, the calculation was kept as simple as possible. The mortality rate in California (which **was** corrected for scavenging and observer biases) was computed by dividing the number of individuals of each species killed per unit time by the number of turbines sampled. The mortality rate for each species was then multiplied by the number of turbines proposed for Phase I and the 500 MW wind farm to estimate the number of individuals of each species that would be killed at the Wyoming wind farm. We applied these estimates (corrected for bias) to the Wyoming situation. There is no information available on different scavenging or observer bias from Wyoming.

Sections 4.6.3 and 4.6.4 of Appendix B in the DEIS describe methods to be used in Wyoming to evaluate scavenging and observer effectiveness at the Wyoming wind farm. The data will be used to "evaluate effectiveness of the carcass searching effort and to estimate the number of carcasses missed because they are removed by scavengers before they can be located by search crews." While it is not stated explicitly, these data will be used, if appropriate, as correction factors for mortality estimates.

Comment #45 This comment will be addressed as five separate comments.

Criteria for Raptor Population Studies. Section 8.2.3.2 describes the processes by which BLM, the USFWS, and the technical committee could require SeaWest to initiate additional studies. While "processes" are not "criteria," BLM believes they will be more effective in identifying and correcting problems than a rigid set of if/then criteria. Problem identification and correction will be a cooperative effort between BLM, USFWS, WGFD, and other project participants.

Passerine Impact Criteria. Relative use and density will be used as indicators of passerine population changes. As stated on page B-28 of the DEIS, changes in relative use and density will be evaluated by comparing density between the Foote Creek Rim and Simpson Ridge study areas and the reference area. These are considered general impact assessment methods.

Passerine Mitigation Criteria. Page 2-8 in the FEIS describes BLM's authority to require retrofit of prior phases should wildlife or other concerns be borne out, "retrofit of prior phases could include but is not limited to relocating turbines, painting blades, and installing warning devices. If the operations of the project causes an asserted violation of Federal law (e.g., MBTA, ESA, or BEPA) the USFWS (in conjunction with other Federal agencies) can initiate legal proceedings to enforce the provisions of such law." In addition, "if project operations cause a violation of stipulations promulgated in the ROW grant, BLM may require KENETECH [SeaWest] to take measures to correct the violation and may revoke the ROW grant for use of Public Land if KENETECH [SeaWest] fails to correct the violation." These are considered general mitigation criteria.

RECORD OF DECISION - SEAWEST/PacifiCorp Windpower Project

Mountain Plover Mitigation Criteria. Numbers of mountain plovers, reproductive effort, and reproductive success (if it can be determined) will be used as indicators of mountain plover population dynamics. As stated on B-30 in DEIS, data from the project area will be compared with data from the reference area to evaluate project impacts on these parameters. BLM's approach to the mitigation process for these unknown impacts is described in Section 8.2.5 in the FEIS.

Negative impacts. Negative impacts on each resource are discussed in Chapter 4.0 in the DEIS. For example, in the section referring to big game, impacts such as direct mortality and habitat loss are discussed as negative impacts.

Comment #46 The Biological Opinion is attached to this ROD.

Comment #47 No monitoring or measures designed specifically to mitigate impacts to amphibians and reptiles are proposed because these are not considered species of concern. Mitigation measures for minimizing impacts to wetlands and riparian areas will help minimize impacts to these species.

Comment #48 The adequacy of baseline data for the purposes of decision making is discussed in Section 8.2.4 in the FEIS. Baseline data indicate Foote Creek Rim is not a migration corridor. Peregrine falcon mortality, as well as population indicators (i.e., relative abundance and use), will be monitored to obtain additional data on potential impacts to this species.

Comment #49 All available data concerning recreational use within the KPPA are presented in Section 3.5.4 in the DEIS. Because recreational use will continue on Public Lands, impacts are not considered significant; therefore, it is unreasonable to collect additional baseline data on recreational use of the area. Furthermore, KENETECH provided an access easement on 640 acres to WGFD to compensate for utilization of 30 acres in Section 18.

Comment #50 Land management agencies rarely, if ever, have comprehensive information on which to base their decisions; therefore, there is risk associated with every decision. All relevant available information is presented in the DEIS and FEIS, and while this information is not complete, it is adequate for the purposes of decision making.

Comment #51 The FEIS states "unless situations **occur** for which exceptions may be granted." See response to Comment #2.

Comment #52 The effects of disturbance on mountain plover habitat effectiveness may be adverse or beneficial. Mountain plovers have been observed nesting within or immediately adjacent to human disturbances and may be attracted to these areas [Parrish, T.L., S.H. Anderson, and W.F. Oelklaus. 1993. Mountain plover habitat selection in the Powder River Basin, Wyoming. *Prairie Naturalist* 25(3):219-226.]. Data collected during monitoring will be used to determine if wind farm development affects mountain plover habitat effectiveness. If it is determined that mitigation for loss of habitat effectiveness is needed, the technical committee will be consulted to recommend appropriate mitigation measures.

Comment #53 See response to Comment #2.

Comment #54 Table 8.3 is located on pages 8-59 and 8-60 in the FEIS.

Comment #55 The referenced text change is located on page B-1 in the FEIS.

Comment #56 The response to these comments is presented on page 8-61 (response to WGFD Comment AE153) in the FEIS.

RECORD OF DECISION - SEAWEST/PacifiCorp Windpower Project

Comment #57 Appendix B in the DEIS is the current proposed monitoring protocol. BLM is committed to adequate monitoring, including appropriate carcass search intervals. These procedures will be modified, in consultation with the technical advisory committee, if warranted.

Comment #58 Raptor carcasses will be used, if possible, during the scavenger and observer effectiveness studies. The technical committee will advise BLM concerning the need to obtain within-season replication during scavenging trials.

Comment #59 Thank you for clarifying this comment.

Comment #60 Passerine mortality data, which will be collected during all seasons, will be reviewed by the technical committee who will advise BLM concerning the level of significance associated with the observed mortality. If the technical committee deems that non-breeding season passerine mortality is substantial, then BLM may require SeaWest to conduct nonbreeding season passerine surveys.

Comment #61 BLM stipulations concerning construction in critical wildlife habitats during critical periods are presented in Section 2.1.11 in the DEIS. Additional mitigation measures are presented in Chapter 5.0 of the DEIS and FEIS, the POD, and Section E in this ROD. Parturition and incubation periods are periods when animals may be particularly sensitive to construction activity, these periods are considered crucial to the survival of individuals and the health of the population. BLM stipulations prevent construction during these periods. However, none of these areas are present at Foote Creek Rim, therefore, the restrictions are not applied. As discussed in Section 5.1.3.11 in the DEIS, construction workers and wind farm employees will be instructed to avoid unnecessary disturbance of wildlife and to obey speed limits at all times.

Mountain plovers may avoid development areas during construction. However, as discussed in response to Comment #52, mountain plovers also may be attracted to development areas. If they are precluded from nesting during construction, this would cause a loss of breeding habitat for one year in each development area where plovers nest, possibly more if they are permanently displaced from the area. As stated in the DEIS (page 4-68), impacts to plovers due to reduction of habitat on Foote Creek Rim are considered significant for the purposes of decision making. Mountain plover use, reproductive effort, and reproductive success (if it can be measured) will be monitored to assess impacts and, if necessary, the technical committee will be consulted to recommend appropriate mitigation measures.

Comment #62 With standard mitigation measures properly implemented, there will be no construction-related impacts to these species. Route numbers 1 and 2 have other factors that were considered undesirable (e.g., increased visual impacts, steep slopes).

Comment #63 BLM has implemented a big game monitoring program (see Appendix B in the DEIS). The technical committee will evaluate impacts to habitat effectiveness based on monitoring results and recommend mitigation measures, if appropriate.

Comment #64 BLM acknowledges the survey data may be incomplete. However, this data is the most comprehensive collected for this area.

Comment #65 Only one goshawk was observed during the October 1993-March 1995 avifauna surveys. Because this species uses the KPPA infrequently, impacts are expected to be negligible, and thus further data analysis is not warranted at this time. Thank you for providing the information concerning Dr. Squires' research; BLM will consult this resource if concern for goshawks escalates in the future.

RECORD OF DECISION - SEAWEST/PacifiCorp Windpower Project

Comment #66 We appreciate the time and effort the WGFD personnel have spent in numerous meetings, phone calls and correspondence to assist BLM in understanding the issues and concerns held by the Department. With your continuing involvement throughout the development and monitoring phases - and your participation on the advisory committee, we hope to continue to count on your expertise in assisting us to provide the best assessment and management of this - the first large scale wind energy project in Wyoming.

RECORD OF DECISION - SEAWEST/PacifiCorp Windpower Project

**SEAWEST WINDPOWER PROJECT
LEGAL DESCRIPTION FOR RIGHT-OF-WAY GRANT WYW-130382
(WIND FARM)**

	ACRES
<u>T. 19 N., R. 78 W.</u>	
Section 06: Lots 1-3, S $\frac{1}{2}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$ NW $\frac{1}{4}$, E $\frac{1}{2}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$	479.79
Section 18: Lots 1-4, N $\frac{1}{2}$ NE $\frac{1}{4}$, SW $\frac{1}{4}$ NE $\frac{1}{4}$, E $\frac{1}{2}$ NW $\frac{1}{4}$, E $\frac{1}{2}$ SW $\frac{1}{4}$, NW $\frac{1}{4}$ SE $\frac{1}{4}$	460.82
<u>T. 21 N., R. 80 W.</u>	
Section 06: Lots 1-7, S $\frac{1}{2}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$ NW $\frac{1}{4}$, E $\frac{1}{2}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$ (ALL)	639.68
Section 12: ALL	640.00
Section 14: ALL	640.00
Section 18: Lots 1-4, E $\frac{1}{2}$ W $\frac{1}{2}$	325.60
Section 30: Lots 1 & 2	80.80
<u>T. 22 N., R. 80 W.</u>	
Section 18: Lots 1-4, E $\frac{1}{2}$, E $\frac{1}{2}$ W $\frac{1}{2}$ (ALL)	656.80
Section 20: ALL	640.00
Section 22: ALL	640.00
Section 26: N $\frac{1}{2}$ NW $\frac{1}{4}$, SW $\frac{1}{4}$ NW $\frac{1}{4}$	120.00
Section 28: E $\frac{1}{2}$, N $\frac{1}{2}$ NW $\frac{1}{4}$, S $\frac{1}{2}$ SW $\frac{1}{4}$	480.00
Section 30: Lots 1-4, E $\frac{1}{2}$, E $\frac{1}{2}$ W $\frac{1}{2}$ (ALL)	652.31
Section 32: N $\frac{1}{2}$, SE $\frac{1}{4}$	480.00
Section 34: ALL	640.00
<u>T. 20 N., R. 81 W.</u>	
Section 02: Lots 1-4, S $\frac{1}{2}$ (Lying north of Interstate Hwy 80)	≈464.14
<u>T. 21 N., R. 81 W.</u>	
Section 02: Lots 1-4, S $\frac{1}{2}$ N $\frac{1}{2}$, S $\frac{1}{2}$ (ALL)	620.16
Section 04: Lots 1-4, S $\frac{1}{2}$ N $\frac{1}{2}$, S $\frac{1}{2}$ (ALL)	620.00
Section 06: Lots 1-7, S $\frac{1}{2}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$ NW $\frac{1}{4}$, E $\frac{1}{2}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$ (ALL)	634.78
Section 08: W $\frac{1}{2}$	320.00
Section 10: N $\frac{1}{2}$, N $\frac{1}{2}$ S $\frac{1}{2}$, SW $\frac{1}{4}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$ SE $\frac{1}{4}$	560.00
Section 12: E $\frac{1}{2}$, E $\frac{1}{2}$ W $\frac{1}{2}$	480.00
Section 14: ALL	640.00
Section 18: Lots 1-4, E $\frac{1}{2}$, E $\frac{1}{2}$ W $\frac{1}{2}$ (ALL)	643.85
Section 20: ALL	640.00
Section 22: ALL	640.00
Section 24: W $\frac{1}{2}$ W $\frac{1}{2}$	160.00
Section 26: ALL	640.00
Section 28: ALL	640.00
Section 30: Lots 1-4, E $\frac{1}{2}$, E $\frac{1}{2}$ W $\frac{1}{2}$ (ALL)	643.20
Section 32: N $\frac{1}{2}$, N $\frac{1}{2}$ S $\frac{1}{2}$ (lying north of Interstate Hwy 80)	≈360.00
Section 34: NE $\frac{1}{4}$ (lying north of Interstate Hwy 80)	≈ 80.00
<u>T. 22 N., R. 81 W.</u>	
Section 34: ALL	640.00
TOTAL ACRES	≈17,001.93

RECORD OF DECISION - SEAWEST/PacifiCorp Windpower Project

**SEAWEST WINDPOWER PROJECT
LEGAL DESCRIPTION FOR RIGHT-OF-WAY GRANT WYW-130929
(230 kV POWER LINE)**

100-foot ROW Width

T. 19 N., R. 78 W.

Section 06: NE $\frac{1}{4}$ NE $\frac{1}{4}$

T. 20 N., R. 79 W.

Section 02: LOT 4, S $\frac{1}{2}$ NW $\frac{1}{4}$, NE $\frac{1}{4}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$
Section 12: E $\frac{1}{2}$ SE $\frac{1}{4}$, NW $\frac{1}{4}$ SE $\frac{1}{4}$

T. 21 N., R. 79 W.

Section 04: LOTS 1-4
Section 10: E $\frac{1}{2}$ E $\frac{1}{2}$ E $\frac{1}{2}$
Section 22: E $\frac{1}{2}$ E $\frac{1}{2}$ E $\frac{1}{2}$
Section 34: E $\frac{1}{2}$ E $\frac{1}{2}$ NE $\frac{1}{4}$

T. 22 N., R. 79 W.

Section 32: S $\frac{1}{2}$ S $\frac{1}{2}$ SW $\frac{1}{4}$

T. 22 N., R. 80 W.

Section 30: LOTS 3 & 4, E $\frac{1}{2}$ SW $\frac{1}{4}$, S $\frac{1}{2}$ SE $\frac{1}{4}$
Section 32: NE $\frac{1}{4}$, N $\frac{1}{2}$ NW $\frac{1}{4}$
Section 34: N $\frac{1}{2}$ S $\frac{1}{2}$

T. 22 N., R. 81 W.

Section 26: N $\frac{1}{2}$ N $\frac{1}{2}$, SE $\frac{1}{4}$ NE $\frac{1}{4}$

75-foot ROW Width

Section 28: S $\frac{1}{2}$ NE $\frac{1}{4}$

TOTAL LENGTH ON PUBLIC LAND: 50,660 FT. x 100 FT. = 116.30 acres
2,400 FT. x 75 FT. = 4.13 acres

53,060 FT. (10.05 MILES), 120.43 acres

RECORD OF DECISION - SEAWEST/PacifiCorp Windpower Project

**SEAWEST WINDPOWER PROJECT
LEGAL DESCRIPTION FOR RIGHT-OF-WAY GRANT WYW-136588
(ACCESS ROADS TO A kV POWER LINE)**

T. 19 N., R. 78 W.

Section 06: Lot 3, SE $\frac{1}{4}$ NW $\frac{1}{4}$, E $\frac{1}{2}$ SW $\frac{1}{4}$

T. 20 N., R. 78 W.

Section 20: S $\frac{1}{2}$ NE $\frac{1}{4}$, SW $\frac{1}{4}$, N $\frac{1}{2}$ SE $\frac{1}{4}$

T. 20 N., R. 79 W.

Section 02: LOT 1-3, SE $\frac{1}{4}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$ NW $\frac{1}{4}$, SE $\frac{1}{4}$
Section 12: E $\frac{1}{2}$ SW $\frac{1}{4}$, SW $\frac{1}{4}$ SE $\frac{1}{4}$

T. 21 N., R. 79 W.

Section 02: S $\frac{1}{2}$ NW $\frac{1}{4}$
Section 22: SE $\frac{1}{4}$ SE $\frac{1}{4}$
Section 26: S $\frac{1}{2}$ SW $\frac{1}{4}$

T. 22 N., R. 79 W.

Section 32: S $\frac{1}{2}$ S $\frac{1}{2}$
Section 34: S $\frac{1}{2}$ SW $\frac{1}{4}$

T. 22 N., R. 80 W.

Section 28: S $\frac{1}{2}$ SW $\frac{1}{4}$, SW $\frac{1}{4}$ SE $\frac{1}{4}$
Section 30: LOTS 2 - 4, SE $\frac{1}{4}$ SE $\frac{1}{4}$
Section 32: NW $\frac{1}{4}$ NE $\frac{1}{4}$
Section 34: S $\frac{1}{2}$ NE $\frac{1}{4}$, N $\frac{1}{2}$ SW $\frac{1}{4}$, NW $\frac{1}{4}$ SE $\frac{1}{4}$

T. 22 N., R. 81 W.

Section 24: S $\frac{1}{2}$ SW $\frac{1}{4}$
Section 26: NE $\frac{1}{4}$, NE $\frac{1}{4}$ NW $\frac{1}{4}$
Section 28: W $\frac{1}{2}$ NE $\frac{1}{4}$

TOTAL LENGTH ON PUBLIC LAND: 67,040 FT. (12.70 MILES)