Document 80092

WindEISArchives

From: windeiswebmaster@anl.gov
Sent: Friday, December 10, 2004 7:42 PM
To: WindEISArchives
Subject: Wind Energy EIS Comment 80092

Thank you for your comment, Gene Sentz.

The comment tracking number that has been assigned to your comment is 80092. Once the comment response document has been published, please refer to the comment tracking number to locate the response.

Comment Date: December 10, 2004 07:41:43PM CDT

Wind Energy EIS Draft Comment: 80092

First Name: Gene
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Privacy Preference: Don't withhold name or address from public record

Comment Submitted:
Thank you for studying wind power. We need that.

Please don't allow windmills on public land along Montana's Rocky Mountain Front west of Highway 89 and Highway 287. 80092-1

Thank you.

Questions about submitting comments over the Web? Contact us at: windeiswebmaster@anl.gov or call the Wind Energy EIS Webmaster at (630)252-6182.

Response for Document 80092

80092-001: Exclusions of any additional areas from wind energy development will be determined at the project level as part of the site-specific analyses or through local land use planning efforts, with opportunities for full public involvement. As required by the Wind Energy Development Program proposed policies and BMPs, site-specific analyses, including the development of an appropriate monitoring program, will be conducted for any proposed project on BLM-administered lands. The scope and approach for site-specific analyses will be determined on a project-by-project basis in conjunction with input from other federal, state, and local agencies, and interested stakeholders. Through this process, the BLM will develop project-specific stipulations for incorporation into the POD. Site-specific analyses are beyond the scope of the PEIS.

Document 80093

WindEISArchives

From: windeiswebmaster@anl.gov
Sent: Friday, December 10, 2004 8:13 PM
To: WindEISArchives
Subject: Wind Energy EIS Comment 80093

RNP_BLM_Comments_80093.pdf (28...

Thank you for your comment, Troy Gagliano.

The comment tracking number that has been assigned to your comment is 80093. Once the comment response document has been published, please refer to the comment tracking number to locate the response.

Comment Date: December 10, 2004 08:12:26PM CDT

Wind Energy EIS Draft Comment: 80093

First Name: Troy
Last Name: Gagliano
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Zip: 97205
Country: USA
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Attachment: /Big Millie Shared Files/Troy/RNP BLM Comments.pdf

Comment Submitted:
Attached are the comments from the Renewale Northwest Project for the BLM Wind PEIS. If you do not receive the 16 pages of comments please contact our office at 503.223.4544

Thank you,

Troy Gagliano

Questions about submitting comments over the Web? Contact us at: windeiswebmaster@anl.gov or call the Wind Energy EIS Webmaster at (630)252-6182.

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Washington Environmental Council
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Zilkha Renewable Energy

Renewable Northwest Project

December 10, 2004

BLM Wind Energy Programmatic EIS
Argonne National Laboratory, EAD/900
9700 S. Cass Avenue
Argonne, IL 60439

Dear BLM Staff:

We appreciate the opportunity to comment on the Bureau of Land Management's Wind Draft Programmatic EIS (PEIS). The Renewable Northwest Project (RNP) is a unique combination of consumer groups, renewable energy companies and environmental organizations that advocates for the development of new and properly sited solar, wind and geothermal resources in the Pacific Northwest.

In recent years, economics, technology and policy have converged to greatly expand the use of wind power across the BLM's eleven-state region. We expect this growth to continue as wind power compares even more favorably to traditional resources and as state and regional energy policies encourage further development. Five of the eleven states in BLM's region have renewable portfolio standards in place and more are considering them. Also, the Western Governor's Association is calling for the development of 30,000 MW of new "clean energy resources" across the west by the year 2015. Many of the strong wind resources that run across BLM lands can be tapped to meet these goals. Wind energy developers are already seeking permits to build on BLM land and we commend the Bureau for seeking to streamline this process. 80093-1

We hope that this proposed Wind Energy Development Program results in clear and consistent guidelines that determine how BLM manages right-of-way (ROW) applications and grants for wind energy. Without this streamlined program, the length of time necessary to review, process, and approve ROW applications for wind energy projects would be overly burdensome for many developers; a fact that runs contrary to the National Energy Policy's goal of developing renewable energy on federal lands. The "no action alternative" proposed in the Draft PEIS would lead to inconsistencies in the type and degree of mitigation required for individual wind projects.

Our comments are divided into three sections. The first section refers the BLM to the State of Washington's Department of Fish and Wildlife (WDFW) Wind Power Siting Guidelines. These guidelines are relevant to a number of issues in the Draft PEIS. The second section highlights some areas that we support and the third section offers suggestions and highlights some areas of concern.

I. Washington Department of Fish and Wildlife Wind Power Siting Guidelines
We are pleased to see that this draft PEIS mentions the WDFW siting guidelines. RNP, wind project developers and environmental consultants worked with the WDFW for over a year to develop these fair and consistent guidelines for pre-project assessment studies and habitat mitigation. We refer the BLM to the WDFW Siting Guidelines because they are relevant to many sections of the Draft PEIS that focus on avian issues and other general mitigation measures. (For convenience, this brief, 10-page document is attached to the end of these comments.) Although the guidelines contain some mitigation measures specific to habitats in Central and Eastern Washington, they can assist BLM in determining what site-specific studies and mitigation measures might be needed for similar habitat types. 80093-2

A.) Section 2.2.3.2.2: Plan of Development Preparation
This section states, "A monitoring program shall be developed to ensure that environmental conditions are monitored during the construction, operation, and decommissioning phases. The monitoring program should incorporate adaptive management strategies to ensure that potential adverse impacts of wind energy development are mitigated to the fullest extent possible throughout the life of the project. 80093-3

- We refer BLM to pages 3 and 4 of the WDFW Guidelines under "Operational Monitoring" where a Technical Advisory Committee is suggested for monitoring purposes. If unanticipated biological impacts become apparent from the first-year monitoring data, then the Technical Advisory Committee would make suggestions to the permitting agency on additional mitigation and/or studies.

B.) Page 5-64
This section states, "To the extent feasible, the project should be designed to minimize or mitigate the potential for raptor strikes. Scientifically rigorous raptor surveys should be conducted…" 80093-4

- We refer BLM to page 1 of the WDFW Siting Guidelines under "Raptor Nest Surveys".

C.) Section 6.1.2: Environmental Impacts
This section states, "At the project level, operators would be required to develop monitoring programs to evaluate the environmental conditions at the site through all phases of development, to establish metrics against which monitoring observations could be measured, to identify potential mitigation measures, and to establish protocols for incorporating monitoring observations and new mitigation measures into standard operating procedures and project-specific BMPs." 80093-5

- We refer BLM to pages 3 and 4 of the WDFW Guidelines under "Operational Monitoring" where a Technical Advisory Committee is suggested for monitoring purposes.

II. General Support
Some of the ideas contained throughout the Draft PEIS that we support include:

A.) Individual Nature of Each Site 80093-6
- We are pleased to see the PEIS state that each wind power site has unique characteristics and that the amount of environmental assessment and mitigation required for each should be determined on a project-by-project basis. We also support the notion that assessment and mitigation should be negotiated with BLM, USFWS, and relevant state wildlife

agencies so long as there is coordinated effort among the agencies and a specific timeline is established to which all must adhere.

B.) Wind Power has Less Environmental Impact

- **Section 2.6.2: Comparison of Environmental Impacts**
  We support the statement that "indirect environmental impacts could be greater under both the no action and the limited wind energy development alternatives" if they resulted in more fossil fuel power plants. As discussed in Section 6.4.2, land area disturbance, air quality, water use, and waste generation impacts associated with traditional energy sources are greater than those associated with wind energy. 80093-6 (cont.)

C.) Early Stakeholder Involvement

- **Early Involvement of Tribes, Relevant Agencies and Stakeholders (Sections 2.2.3.2.2; 5.10.5)**
  "Federal and state agencies, property owners, and other stakeholders should be contacted as early as possible in the planning process to identify potentially sensitive land uses and issues, rules that govern wind energy development locally, and land use concepts specific to the region."

III. General Comments

A.) 2.2.3.1: Proposed Policies
Department of Defense Involvement
This section states, "Entities seeking to develop a wind energy project on BLM-administered lands, in conjunction with BLM Washington Office and Field Office staff, shall consult with the U.S. Department of Defense (DoD) regarding the location of wind power projects and turbine siting as early in the planning process as appropriate. This consultation shall occur simultaneously at both the installation/field level and the Pentagon/BLM Washington Office level."

- Does this suggest that every wind project developer seeking permission to build on BLM land must consult with DoD, or is consultation required only if a project is within a certain distance from DoD facility or on DoD land? If it is the latter, then it seems reasonable to have DoD involved. Otherwise, requiring consultation with DoD on every wind project seems contrary to BLM's goal of streamlining the process for developing wind projects on federal land. We are not aware of any DoD staff specifically dedicated to consulting with wind energy developers. Requiring this for all wind projects on federal land would be overly burdensome and discourage development on federal lands. It would be helpful to establish a threshold that determines when DoD involvement is required. BLM staff should be educated about this threshold so they can best assist developers and other interested parties. 80093-7

B.) Section 2.2.3.2.2
This section states: "…the location of turbines in areas with high bird usage, in known bird migration pathways, near wetlands and other bird-rich habitats, and in areas with a high incidence of fog and mist, should be avoided."

- Siting should be based on environmental assessment studies that determine whether a particular location is a risk to species of concern. Many existing wind projects are located near areas with high bird usage, in migration pathways, near wetlands and other areas with a high incidence of fog and mist that do not experience high rates of avian mortality. 80093-8

C.) Section 3.2: Land Use
This section states, " Land use. Depending on the location of a proposed wind energy project, special land use determinations may need to be made, particularly if the project is to be sited in or would impact special or protected areas." 80093-9

- The term "special" is vague and may be open to individual interpretation. "Special land use determinations" must be defined.

D.) 3.3.2: Public Safety
This Draft PEIS correctly states that, "Today, with proper engineering design and quality control, blade throw should rarely occur" and that "such an occurrence has been extremely rare." 80093-10

- Ice throw, also mentioned here, is another rare occurrence. The sufficient setback from residences, roads, and other access areas that permitting agencies require should address this issue. These setbacks also mitigate potential noise and visual impacts.

E.) 4.10.1: Wind Energy Contributions to Electricity Production Capacity
This section states that based on "data forecasting in the *Annual Energy Outlook 2004* (DOE 2004a) and State Electricity Profiles (DOE 2004b), renewable energy sources are expected to provide an important share of energy capacity growth in a number of states over the period 2005 through 2025. This is the case particularly in Idaho, Montana, Oregon, and Washington, where renewables are expected to equal or exceed the share of fossil fuel generating capacity in these states. The importance of renewable energy sources in these states is largely due to the contribution of hydropower resources. In contrast, wind energy contributions to overall electricity production capacity over the same time period are expected to be of minor importance, making up less than 10% of new capacity in most states." 80093-11

- Although hydropower is currently the renewable energy resource that contributes the most to the energy mix in the Northwestern United States, this statement implies that the hydropower system will expand and remain the largest renewable energy resource from 2005 through 2025. We already have a large, existing hydropower system and it is unlikely that it will expand greatly by 2025. In contrast, we believe that wind power will continue to expand in the near future and that other renewable technologies should expand by 2025 as their costs become more competitive.

- Wind energy making up 10% of new capacity in the BLM eleven-state region is not "of minor importance" as stated above. That would be a tremendous expansion of wind energy, much of which may be developed on BLM land.

F.) 5.5.2: Site Construction
This sections states, "In general, construction activities would last for a short period (1 or 2 years at most)." 80093-12

- The environmental assessment, development and construction phases together may last more than one year, but in our experience the construction phase itself for many large wind projects in the Pacific Northwest is often between 3-6 months.

G.) 5.3.2.1: Use of Water Resources
This section states, "A number of construction activities would use water. Because the construction phase may last more than 1 year, potentially significant amounts of water would be needed."

80093-13

Wind turbines use very little water over their 20-30 year operating lifetime. Unlike traditional power plants, wind turbines do not require copious amounts of water for electricity generation; only small amounts are required to wash turbine blades.

H.) Section 5.9.5.2.1
This section states that, "Permanent meteorological towers, transmission towers, and other facility structures should be designed so that they cannot be used for perching or nesting by birds."

80093-14

- Wind developers can design sites so that perching is minimized, but they can not completely prevent birds from perching at sites.

I.) Table 5.9.3-3: Avain Impacts
All forms of human development, including wind turbines, affect the natural habitat. Most of the avian mortality associated with wind power occurs at the Altamont Pass Wind Resource Area in Central California. This was one of the first large wind sites and it was built in the early 1980s long before developers and wildlife experts knew how to properly site these facilities. Over the last twenty years the wind industry and scientists have learned a tremendous amount about micrositing techniques. Consequently, avian mortality at modern wind projects has been greatly reduced. For the most recent information about wind turbine and avian interaction, see the study from the National Wind Coordinating Committee found at:

80093-15

http://www.nationalwind.org/pubs/wildlife_factsheet.pdf

The seventh bullet in this section states, "Discussion should be held with the appropriate BLM Field Office staff regarding the occurrence of sensitive species or other valued ecological resources in the proposed project area."

- We applaud this suggestion and hope that there will be sufficient BLM staff committed specifically to wind power that will serve as the point person for this information.

J.) BLM Guidance Documents
According to section 3.6.2, there are BLM program-specific guidance documents that identify mitigation measures for activities on program-specific BLM-administered lands that may be applicable to wind energy development projects. We would encourage BLM to have these documents readily available and easily accessible for applicants in both hard copy and electronic forms.

80093-16

K.) 5.9.5.2.2: Mitigating Site/Wildlife Interactions.
This section states, "Electrical supply lines should be buried to the extent practicable."

80093-17

- While buried lines may be practical at certain locations, for example sites on already disturbed land, burying them under critical habitats like shrub steppe may do more damage to the habitat. This should be determined on a site-by-site basis.

L.) Lighting
The PEIS addresses lighting in various sections and on Page 5-65 is states that, "the FAA should be consulted so that only white strobe lights with a minimum number of flashes per minute are used."

80093-18

- There are discussions among wind industry stakeholders of whether red lights attract birds more than white lights and the FAA is currently considering revisions to its wind power project lighting requirements. Wind developers should comply with what the FAA's determines.

Conclusion
We commend the BLM for its efforts to streamline the permitting of wind energy projects on its lands. As mentioned earlier, the WDFW Wind Power Siting Guidelines follow this section. RNP was instrumental in crafting these guidelines and we invite the BLM to contact us with any questions that may arise.

Sincerely,

Troy Gagliano
Senior Policy Associate

Attachment to Document 80093

Washington Department of FISH AND WILDLIFE

August 2003

SECTION 1

BASELINE AND MONITORING STUDIES FOR WIND PROJECTS

PRE-PROJECT ASSESSMENT

The primary purposes of pre-project assessment studies are to 1) collect information suitable for predicting the potential impacts of the project on wildlife and plants and 2) design the project layout (e.g., turbine locations) so that impacts on biological resources are avoided and minimized. To the extent possible, this pre-project assessment may utilize existing information from projects in comparable habitat types in locations close to the proposed project. The site-specific components and the duration of the assessment should depend on the size of the project, the availability and extent of existing and applicable information in the vicinity of the project, the habitats potentially affected, the likelihood and timing of occurrence of Threatened and Endangered and other Sensitive-Status species at the site, and other factors such as issues and concerns identified during public scoping. Each component is discussed below. The results of the information review and baseline studies should be reported to the affected stakeholders (e.g., state and federal wildlife agencies) in a timely fashion.

Information Review

Existing information on species and potential habitats in the vicinity of the project area should be reviewed and if appropriate, mapped. Sources of existing information should include resource agencies, local experts, recognized databases (e.g., Priority Habitats and Species [PHS] database), and data gathered at other nearby wind plants or other types of projects. This information should be used to develop a current state-of-the-art field and analysis protocol that is reviewed and approved by the state wildlife agency.

Habitat Mapping

Key information about general vegetation and land cover types, wildlife habitat, habitat quality, extent of noxious weeds, and physical characteristics within the project area should be collected and compiled using current state-of-the-art protocols.

Raptor Nest Surveys

At a minimum, one raptor nest survey during breeding season within 1-mile of the project site[1] should be conducted to determine the location and species of active nests potentially disturbed by construction activities, and to identify active and potentially active nest sites with the highest likelihood of impacts from the operation of the wind plant. A larger survey area (e.g., a 2-mile buffer) is recommended if there is some likelihood of the

[1] Site – a project "site" for the purposes of addressing potential raptor nest disturbances is defined as the furthest extent of a ground disturbing activity and includes gravel sites used for construction, overhead and underground electrical routes, new and upgraded substations.

occurrence of nesting state and/or federally threatened and endangered raptor species (e.g., ferruginous hawk, bald eagle, golden eagle), or if empirical data on displacement impacts may be monitored after construction (see Research-Orientated Studies Below).

General Avian Use Surveys
A minimum of one full season of avian use surveys is recommended following current state-of-the-art protocols to estimate the use of the project area by avian species/groups of interest during the season of most concern (usually spring/early summer). Additional seasonal data (e.g. fall or winter) is recommended in the following cases: 1) use of the site for the avian groups of concern is estimated to be high relative to other projects, 2) there is very little existing data regarding seasonal use of the project site, and/or 3) the project is especially large. This additional avian use data should be collected to refine impact predictions and make decisions on project layout.

Surveys for Threatened, Endangered and Sensitive Species
If existing information suggests the probable occurrence of state and/or federal threatened or endangered or sensitive-status species on the project site at a level of concern, focused surveys are recommended during the appropriate season to determine the presence or likelihood of presence of the species. For example, if bald eagles are expected to winter in concentrations in the project vicinity, targeted surveys to estimate bald eagle use of the site would be appropriate.

MINIMIZATION OF WILDLIFE IMPACTS

One goal of the pre-project assessment is to help design the project to avoid, reduce and minimize impacts to habitat and wildlife. Below are some considerations for avoiding and minimizing impacts to wildlife.

Avoid Impacts

- Encourage development in agricultural and already disturbed lands, including using existing transmission corridors and roads where possible.
- Use of tubular towers is recommended to reduce the ability of birds to perch on towers and to possibly reduce the risk of collision. Discourage the use of lattice towers, particularly those with horizontal cross-members.
- Discourage tower types that employ guy wires. If guy wired towers are approved, encourage the requirement of bird flight diverters on the guy wires.
- Avoid high bird concentration areas, especially concentration areas of sensitive status species, and breeding sites.
- Discourage the use of rodenticides to control rodent burrowing around towers.
- Encourage the protection of PHS priority habitats.

Minimize Impacts

- Minimize use of overhead power lines.[2]
- When overhead lines are used, use designs that avoid and minimize impacts to raptors and other birds (e.g., adequate conductor spacing, use of perch guards).
- Minimize the use of lights on towers, in accordance with federal, state, and local requirements, wherever possible because they may attract flying wildlife to the vicinity of the turbines in certain conditions.
- Encourage the control of noxious weeds in accordance with federal, state, and local laws. Encourage the control of detrimental weedy species that invade existing habitat as a result of disturbance from construction and operation.
- Encourage the requirement of a complete road siting and management plan, including vehicle-driving speeds that minimize wildlife mortality.
- Encourage the requirement of a fire protection plan.

Reduce or Eliminate Impacts Over Time

- Encourage a decommissioning condition that would require removal of the turbines and infrastructure when it ceases operation, and restoration of the site to approximate pre-project conditions.

OPERATIONAL MONITORING

As is the case with most development, some mortality of bats and birds is expected to result from wind power projects. However, it is anticipated that significant impacts to wildlife can be avoided or lessened at most wind projects if proper pre-project assessment is implemented and good project design and management practices are established. Monitoring studies, such as carcass surveys, using current state-of-the-art protocols are required to determine the actual direct impacts of the wind farm on birds. The duration and scope of the monitoring should depend on the size of the project, and the availability of existing monitoring data at projects in comparable habitat types.

A Technical Advisory Committee (TAC) is recommended to be responsible for reviewing results of monitoring data and making suggestions to the permitting agency regarding the need to adjust mitigation and monitoring requirements based on results of initial monitoring data and available data from other projects. The range of possible adjustments to the monitoring and mitigation requirements should be clearly stated in the project permit (e.g., Conditional Use Permit). Adjustments should be made if unanticipated impacts become apparent from monitoring data. Examples of such changes

[2] However, use of overhead power lines might be warranted if habitat type is of concern.

may include additional monitoring or research focused to understand the identified impacts (e.g., bats) and creation of raptor nesting structures (artificial or natural, on or off-site) if significant impacts to raptor species are identified. Adjustments that are not feasible because they would make the wind project un-financeable include removing turbines or shutting down turbines during certain periods of the year. Adjustments can also reduce monitoring requirements based on monitoring data and site-specific conditions.

Potential members to the TAC include stakeholders such as state and federal wildlife agencies, the developers, environmental groups, landowners, and county representatives. Protocols for conducting the monitoring study and procedures for reporting and handling, and rehabilitating injured wildlife should be reviewed by the TAC. Progress reports summarizing the monitoring results should be reported to the TAC on a quarterly basis. Reporting schedules and scope of reports will be developed in the event of unusual unanticipated avian mortality.

RESEARCH-ORIENTED STUDIES

Standard pre-project assessment studies and standard fatality operational monitoring have been distinguished from more research-orientated studies. At some projects, additional studies that utilize pre-construction data may be conducted to test specific research hypotheses about impacts to a particular species or group of species. Rather than being necessary for pre-permit assessment, such studies are often more research-oriented and often are focused on indirect impacts, such as displacement, that provide information for future projects. Examples include the use of gradient analysis in understanding the level of displacement of grassland nesting birds as a function of distance from turbines or raptor nest monitoring comparing density and nest success before and after operation of the wind plant. If such studies are determined to be important to the overall understanding of wind energy/wildlife interactions, they should be designed to follow appropriate experimental designs and state of the art protocols (Anderson et al. 1999, Morrison et al. 2002). Funding for these more research- oriented studies should be solicited from multiple sources, including the wind industry, environmental groups, state and federal agencies, advocacy groups and other sources.

REFERENCES

Anderson, R.L., M.L. Morrison, K. Sinclair, M.D. Strickland. 1999. Studying wind energy/bird interactions: a guidance document. National Wind Coordinating Committee Avian Subcommittee.

Morrison, M.L., W.M. Block, M.D. Strickland, and W.L. Kendall. 2001. Wildlife study design. Springer-Verlag New York, Inc., New York, NY. 210 pp.

SECTION 2
WIND PROJECT HABITAT MITIGATION

General Principles for Wind Project Siting and Mitigation
These principles are intended for projects proposed for sites east of the Cascades, where almost all wind projects have been proposed to date. These principles would require review and revision for sites west of the Cascades.

- Implementation of the mitigation measures contained in this proposal are presumed to fully mitigate for habitat losses for all species, including species classified as "protected," in the Washington Administrative Code, but excluding species classified as state "endangered" or federally "threatened" or "endangered," for which additional species- and site-specific mitigation may be necessary.
- Wind project developers should be encouraged to site wind power projects on disturbed lands (i.e., developed, cultivated, or otherwise disturbed by road or other corridors).
- Wind project developers should be encouraged to place linear facilities (such as collector cable routes, transmission line routes, or access roads) in or adjacent to existing disturbed corridors in order to minimize habitat fragmentation and degradation.
- Wind project developers should be discouraged from using or degrading high value habitat areas, especially shrub-steppe habitat in "excellent" condition.
- Wind project developers are responsible for acquiring replacement habitat under this proposal and for management of such lands for the life of the project, unless otherwise indicated.
- WDFW mitigation guidance seeks to recognize the full range of environmental benefits and impacts of development in determining appropriate mitigation, including the fact that wind is a renewable energy resource that can replace fossil fuels and other energy sources that have serious environmental consequences to plant and animal species and habitats.

MITIGATION FOR PERMANENT HABITAT IMPACTS

A. No mitigation required for cropland, developed, or disturbed areas

No mitigation will be required for impacts to lands that have little or no habitat value. Examples include lands that are:

- Currently being cultivated;
- Developed (long term); or
- Disturbed by an active road or other corridor that eliminates natural habitat values.

B. Criteria for Mitigation by Acquisition of Replacement Habitat

In each of the mitigation categories listed below, the criteria indicate that the replacement habitat should be:

- Like-kind (e.g., shrub-steppe for shrub-steppe; grassland for grassland) and/or of equal or higher habitat value than the impacted area, noting that an alternative ratio may be negotiated by a wind developer and WDFW for replacement habitat that differs from impacted habitat;
- Given legal protection (through acquisition in fee, a conservation easement, or other means);
- Protected from degradation for the life of the project to improve habitat function and value over time;
- In the same geographical region as the impacted habitat; and
- Jointly agreed upon by the wind developer and WDFW.

If a wind power applicant meets these criteria, then the following ratios apply:

1. **Acquisition of Replacement Habitat Subject to Imminent Development – 1:1**
   One acre of suitable replacement habitat will be accepted as mitigation for one acre of permanently impacted habitat where the replacement habitat is subject to imminent development – that is, there is a credible plan to develop the replacement habitat within five years and WDFW concurs with this assessment.

   Rationale: There is no net loss of habitat function or value where the replacement habitat would be lost but for its acquisition as mitigation. In fact, there should be a net gain in habitat value over time since protection of the replacement habitat (of equal or better value than the impacted area) will usually result in improved habitat value.

2. **Acquisition of Grassland, CRP Replacement Habitat – 1:1**
   One acre of suitable replacement grassland or CRP habitat will be accepted as mitigation for one acre of such habitat that is permanently impacted.

   Rationale: Habitat values are protected under this approach because:

   - Development of degraded grasslands or CRP habitat is preferable to development of shrub-steppe or other high value habitats.
   - The replacement habitat was at some risk of development and is now given permanent protection.
   - The replacement habitat is likely to improve in habitat function and value over time as degrading forces are removed.
   - The value of the replacement habitat is equal to or better than the habitat value of the impacted area.
   - The 1:1 ratio combines a number of factors -- which could require much time, effort, and expense to analyze and process -- in a simple and equitable approach.

3. **Acquisition of Shrub-Steppe, Other High-Value Habitat– 2:1**
   Two acres of suitable shrub-steppe or other high-value replacement habitat will be accepted as mitigation for one acre of permanently impacted shrub-steppe or other high-value habitat. In this context, "other high-value habitat" includes lithosol/shrub matrix (plant communities on lithosol soils intermixed with other plant communities on deeper soils).

   Rationale: A net gain in habitat value is likely under this approach because the replacement habitat:

   - Was at some risk of development and is now given permanent protection.
   - Is likely to improve in habitat function and value over time as degrading forces are reduced on the protected area.
   - Value is equal to or better than the habitat value of the impacted area.
   - The 2:1 ratio combines a number of factors -- which could require much time, effort, and expense to analyze and process -- in a simple and equitable approach.

   Exception for habitat in "excellent" condition: Where a wind project will affect habitat in "excellent" condition (based on federal methodologies for assessing range land, or other method acceptable to WDFW), wind project developers will engage in additional consultation with WDFW regarding suitable mitigation requirements for such habitat.

MITIGATION FOR TEMPORARY IMPACTS TO HABITAT

Temporary impacts to habitat are those that are anticipated to end when construction is complete and land has been restored. Temporary impacts include trenching for placement of underground cables, construction staging areas, lay-down areas, and temporary construction access. Temporary impacts also include the portions of road corridors that are used during construction but that are re-vegetated at the end of construction, but do not include the portions of roads that continue to be used for project operations (which are considered permanently affected). The goal of restoration of temporary impacts should be to restore the disturbed habitat to a condition that is at least as good as its pre-project condition.

A. No Mitigation Required for Temporary Impacts to Cropland, Developed or Disturbed Areas (same as for permanent impacts)

B. Restoration, Mitigation for Temporary Impacts to Grass, CRP Lands -- 0.1:1
   Temporary impacts to grassland or CRP habitat can be mitigated by:

   - Implementing a WDFW approved restoration plan for the impacted area. A restoration plan should include site preparation, reseeding with appropriate vegetation, noxious weed control, and protection from degradation (irrigation

or planting with live plants will not be required).

- Acquiring 0.1 acres of suitable replacement habitat for every acre temporarily impacted by the project.
- A good faith effort should be made to restore the impacted area, however long-term performance targets should not be imposed since temporal losses and the possibility of restoration failure are incorporated into the acquisition and improvement of replacement habitat.
- WDFW and a wind developer may agree on other ratios and terms where doing so is mutually beneficial.

C. Restoration, Mitigation for Temporary Impacts to Shrub-steppe Habitat—0.5:1

Temporary impacts to shrub-steppe habitat can be mitigated by:

- Implementing a WDFW approved restoration plan for the impacted area. A restoration plan should include site preparation, reseeding with appropriate vegetation, noxious weed control, and protection from degradation (irrigation or planting with live plants will not be required).
- Acquiring 0.5 acres of suitable replacement habitat for every acre temporarily impacted by the project.
- A good faith effort should be made to restore the impacted area, however long-term performance targets should not be imposed since temporal losses and the possibility of restoration failure are incorporated into the acquisition and improvement of replacement habitat.
- WDFW and a wind developer may agree on other ratios and terms where doing so is mutually beneficial.

Customized Acquisition and Restoration Packages – This Habitat Mitigation proposal should not be viewed as preventing or discouraging WDFW and wind developers from negotiating "customized" or "alternative" mitigation packages where circumstances make it desirable for both parties to use accepted methodologies (such as NRDA or an alternative mitigation option) to do so.

SECTION 3
WIND POWER ALTERNATIVE MITIGATION PILOT PROGRAM

INTRODUCTION: This pilot program offers an alternative to conventional mitigation for wind projects that can greatly improve the habitat value per mitigation dollar as well as provide a more streamlined and efficient mitigation process for applicants. A significant feature of the pilot program is that it links targeted acquisition by WDFW of the highest value habitat in central and eastern Washington[3] with sustained "stewardship" funding from wind projects to restore, manage, and monitor these critical habitat areas. Fortunately, many of the areas that have the highest habitat values are also low cost, providing an outstanding opportunity to maximize the value of mitigation funds.

Because the Alternative Mitigation Pilot Program is experimental in nature, the fee will be reviewed annually, and adjusted as necessary, by WDFW to ensure that it is equitable, compared to the conventional mitigation option in Section 2, and provides incentives to encourage significant participation by wind developers. In addition, the Alternative Mitigation Pilot Program will be reviewed and evaluated at the end of five years, along with the other sections of the Wind Power Guidelines.

GOAL: The goal of the Wind Power Alternative Mitigation Pilot Program is to provide an optional and streamlined approach to mitigation that results in better habitat value and is more attractive to wind developers than conventional "on-site" mitigation.

PRE-PROJECT ASSESSMENT, OPERATIONAL MONITORING

A wind project applicant may either:

1. Follow the guidance set forth in Section 1 of the Wind Power Guidelines document (Baseline and Monitoring Studies for Wind Projects), or
2. Follow a streamlined process (to be negotiated with WDFW) if the project is to be sited in an area that has been determined by WDFW to present a low probability of significant risk to wildlife (and efforts have been made to avoid and minimize wildlife impacts).

ALTERNATIVE HABITAT MITIGATION

After determination by the wind project applicant, in consultation with WDFW, of the project's impact on habitat (in terms of acres permanently and temporarily impacted, and the type and general quality of habitat impacted), the applicant and WDFW will identify the appropriate annual fee for the life of the project[4], based on an Alternative Mitigation Fee Rate of $55.00/acre/year for each acre of replacement habitat that would be owed

[3] At the time of this writing, a request is being made to the State Legislature for an appropriation in the 2004 Supplemental Operating Budget.

[4] "Life of the project" is defined as beginning at the end of the first year of commercial operation and ending with implementation of the project decommissioning plan.

using the ratios and analysis contained in Section 2.[5]

As noted above, the Alternative Mitigation Fee Rate will be reviewed annually, and adjusted as necessary, by WDFW. Changes to the fee will be applied to future wind development proposals (for which mitigation has not yet been determined); changes in the fee will not be applied retroactively.

General provisions:

- The fee listed above is based on habitat in "average" condition and can be increased or decreased by up to 25% to account for differences in habitat quality.
- The applicant will be required to implement an approved restoration plan for temporarily impacted areas (in accordance with Section 2).
- In cases where the project impacts a mixture of habitat types, the fee schedule will be applied accordingly (to the nearest acre).
- The annual fee will be used primarily to support "stewardship" of high-value habitat in the same ecological region as the project (for management, monitoring, restoration, protection from degradation). It is envisioned that these annual stewardship funds will be applied to strategically important habitat in central and eastern Washington that is newly acquired by WDFW. The annual fees will be deposited into a dedicated WDFW account and may also be used for acquisition.
- If the applicant and WDFW cannot agree on a mutually advantageous "package" under the alternative mitigation program, the conventional mitigation guidance in Section 2 will be applied to the project.

---

[5] To determine Alternative Mitigation Fee, use the guidance provided in Section 2 to:

1) Determine acres permanently and temporarily impacted by project for the shrub-steppe and grass categories (i.e., permanently impacted shrub-steppe, permanently impacted grass/CRP, temporarily impacted shrub-steppe, and temporarily impacted grass/CRP);
2) Multiply the acres in each of the four categories by the applicable ratio (e.g., shrub-steppe acres permanently impacted x 2.0);
3) Sum the acreage of the four categories to arrive at the total acres of mitigation owed; and
4) Multiply this total by the Alternative Mitigation Fee Rate to arrive at total annual payment for the project.

Responses for Document 80093

80093-001: Thank you for your comment. We appreciate your input and participation in the public review process.

80093-002: The WDFW Siting Guidelines may be one source of information consulted during the site-specific analyses that will be conducted for each wind energy development project on BLM-administered lands.

80093-003: As required by the Wind Energy Development Program proposed policies and BMPs, site-specific analyses will be conducted for any proposed project on BLM-administered lands in conjunction with input from other federal, state, and local agencies, and interested stakeholders. The establishment of a technical advisory committee to oversee activities at a given site would be a topic for consideration during the site-specific analyses.

80093-004: Because the PEIS encompasses 11 states, it is not appropriate for the document to stipulate state-specific guidelines. As required by the Wind Energy Development Program proposed policies and BMPs, site-specific analyses, including surveys for raptor nest sites, will be conducted for any proposed project on BLM-administered lands. The scope and approach for such site-specific surveys and other analyses will be determined on a project-by-project basis in conjunction with input from other federal, state, and local agencies, and interested stakeholders. Through this process, the BLM will develop project-specific siting and design stipulations for incorporation into the POD. Descriptions of site-specific analyses are beyond the scope of the PEIS. No text change has been made to the document in response to your comment.

80093-005: As required by the Wind Energy Development Program proposed policies and BMPs, site-specific analyses, including the development of an appropriate monitoring program, will be conducted for any proposed project on BLM-administered lands in conjunction with input from other federal, state, and local agencies, and interested stakeholders. The establishment of a technical advisory committee to oversee monitoring activities at a given site would be a topic for consideration during the site-specific analyses.

80093-006: Thank you for your comment.

80093-007: The BLM and DoD are working on an interagency protocol agreement that will establish a consultation process between the two agencies on wind energy development projects on BLM-administered land. The agreement will establish a process and identify the scope of potential issues for consultation. The BLM will seek consultation with the DoD on all wind energy development projects.

80093-008: This BMP requirement has been deleted. This guidance has been retained as a suggested mitigation measures in Section 5.9.5.2.2.

80093-009: Special land use areas refer to areas that contain special resource values (e.g., areas that are environmentally sensitive, contain unique physical attributes, or have unique land use ownership or designation). Special land use areas could suffer resource impacts from a wind development project that could not be mitigated and/or that conflict with existing or planned multiple-use activities. Special land use determinations would be made on a project-by-project basis. These would be determined in conjunction with input from other federal, state, and local agencies, and interested stakeholders.

80093-010: Thank you for your comment. Setbacks from residences, roads, and other public access areas will be determined on a site-specific basis.

80093-011: The text in the PEIS has been changed in response to your comment.

80093-012: Your experience is consistent with what the BLM might expect to be a desirable schedule for wind farm developers. Minimizing construction phases will certainly control costs. However, the exigencies and uncertainties of weather, as well as a number of other factors outside the developer's control may extend that construction phase. Nevertheless, your experiences fall within the time range for construction specified in the text.

80093-013: The referenced statement in Section 5.3.2.1 of the PEIS discusses water use only during the construction phase. Section 5.3.3, Site Operation, indicates that impacts on water resources would be limited to possible water quality impacts. No text change has been made to the document in response to your comment.

80093-014: Comment noted. The text has been revised to state that "...structures should be designed to discourage their use for perching or nesting..."

80093-015: The BLM is fully committed to ensuring that sensitive species and other valued ecological resources are fully considered in all aspects of any wind energy project proposed for BLM-administered lands.

80093-016: Your recommendation is being taken into consideration.

80093-017: The intent of this mitigation measure is to encourage the burial of electrical supply lines to the greatest extent feasible without adding to project-related habitat disturbance. The mitigation measure has been rewritten to clarify this.

80093-018: It is agreed that wind farm developers and operators must identify and comply with all applicable FAA regulations and requirements, and that requirement is established in the 7th bullet under Human Health and Safety, Section 2.2.3.2.2,

Plan of Development Preparation. The text regarding use of white strobe lights with a minimum number of flashes per minute has been removed.

Document 80094

WindEISArchives

From: windeiswebmaster@anl.gov
Sent: Saturday, December 11, 2004 1:54 AM
To: WindEISArchives
Subject: Wind Energy EIS Comment 80094

Thank you for your comment, Maeve Sowles.

The comment tracking number that has been assigned to your comment is 80094. Once the comment response document has been published, please refer to the comment tracking number to locate the response.

Comment Date: December 11, 2004 01:53:30AM CDT

Wind Energy EIS Draft Comment: 80094

First Name: Maeve
Middle Initial: E
Last Name: Sowles
Organization: Lane County Audubon Society
Address: #####
City: #####
State: ##
Zip: #####
Country: USA
Privacy Preference: Withhold address only from public record

Comment Submitted:
Wind power has many advantages as a power generation resource. The main concern I have for this programmatic EIS BLM decision relates to siting of the wind power farms. A specific area must be evaluated for native birds and other flying species throughout an annual cycle. Flying animals have different needs and migration patterns at different times of the year. Each season must be evaluated for habitat needs and migration routes both at day and night. The range of species must also be evaluated, since birds of different sizes fly at different heights. One siting aspect would be to place wind power farms in agricultural areas where human disturbance is already established, rather than in undisturbed areas. Leave the wild places for wildlife. Another reason for placing wind turbines near human settlements is to minimize the power lines through remote areas of BLM property. This decreases the expense of transporting the electricity. The turbines and power lines have a deadly effect on large birds such as condors, eagles, hawks and owls. Large migratory waterfowl and wading birds can also be decimated by a poorly placed wind farm. Many of these species use ancient migratory routes and a gauntlet of wind power turbines or power lines can destroy a whole population if placed in the wrong hilltop or valley. Overall habitat destruction and fragmentation should be considered for bird, bat and other species that are threatened by human activity. The range of species that could be impacted by general human disturbance in fragile, marginal ecosystems goes beyond birds and bats. General resource extraction, as well as wind power must not be considered in such ecosystem areas. BLM is the steward of remote areas that need protection so that wildlife can survive. Saving some of this land for the wildlife, and for the future enjoyment of humans who want to see and experience a quiet ridgetop as a golden eagle soars up, over and away into a blue sky is the job you must do. 80094-1
Sincerely,
Maeve Sowles, President
Lane County Audubon Society

Questions about submitting comments over the Web? Contact us at: windeiswebmaster@anl.gov or call the Wind Energy EIS Webmaster at (630)252-6182.

Responses for Document 80094

80094-001: The identification of specific areas to be excluded from wind energy development or the siting of individual facility structures will be determined at the project level as part of the site-specific analyses or through local land use planning efforts, with opportunities for full public involvement. As required by the Wind Energy Development Program proposed policies and BMPs, site-specific analyses, including the identification of important or sensitive habitats and other ecological resources, will be conducted for any wind energy project proposed for BLM-administered lands. The scope and approach for site-specific analyses will be determined on a project-by-project basis in conjunction with input from other federal, state, and local agencies, and interested stakeholders. Through this process, the BLM will develop project-specific siting and design stipulations for incorporation into the POD. Site-specific analyses and siting details are beyond the scope of the PEIS. No text change has been made to the document in response to your comment.

Document 80096

WindEISArchives

From: windeiswebmaster@anl.gov
Sent: Monday, December 13, 2004 5:45 PM
To: WindEISArchives
Subject: Wind Energy EIS Comment 80096

BLM_Programmatic
_Wind_EIS_Coop...

Thank you for your comment, David Swanson.

The comment tracking number that has been assigned to your comment is 80096. Once the comment response document has been published, please refer to the comment tracking number to locate the response.

Comment Date: December 13, 2004 05:44:32PM CDT

Wind Energy EIS Draft Comment: 80096

First Name: David
Middle Initial: R
Last Name: Swanson
Organization: Western Area Power Administration
Address: 12155 W. Alameda Parkway
City: Lakewood
State: CO
Zip: 80228
Country: USA
Email: swanson@wapa.gov
Privacy Preference: Don't withhold name or address from public record
Attachment: P:\NEPA\BLM Programmatic Wind EIS Coop Request.pdf

Comment Submitted:
Offical version of comments previously provided with 80087. See attached.

Questions about submitting comments over the Web? Contact us at: windeiswebmaster@anl.gov or call the Wind Energy EIS Webmaster at (630)252-6182.

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

DEC 13 2004

Mr. Ray Brady
Group Manager, WO350
U.S. Department of the Interior
Bureau of Land Management
1849 C Street NW
LS1000
Washington, DC 20036

Dear Mr. Brady:

The Western Area Power Administration (Western), U.S. Department of Energy (DOE), reviewed the Bureau of Land Management (BLM) *Draft Programmatic Environmental Impact Statement on Wind Energy Development on BLM-Administered Lands in the Western United States, DES 0441* (PEIS). Based on our review, we found that the draft PEIS covers crucial policy and program issues needed to make sound decisions about wind energy development. However, as indicated to you in our letter dated December 19, 2003, we believe that the PEIS must also consider the impact of wind development on the electric transmission system. A proposed wind farm development would not be viable unless there were firm arrangements for interconnection with the electrical transmission system. Since Western may provide transmission arrangements for several wind energy projects in the future, we request that Western be designated as a cooperating agency on the PEIS. As a cooperating agency, Western would strengthen the PEIS discussion and analysis by providing technical expertise in transmission system planning and operation. Western's cooperating agency status would help avoid duplication of effort and streamline environmental reviews for projects where Western and BLM would have actions related to any proposed wind development. Western currently has two interconnection requests for wind developments that would be located on BLM-administered lands (Montana and Arizona). Designating Western as a cooperating agency would be consistent with the purposes of the Council on Environmental Quality's emphasis on agencies becoming a cooperating agency where they have special expertise (40 CFR 1501.6) and would meet the requirement set forth in Executive Order 13212, for executive departments and agencies to "expedite projects that will increase the production, transmission, or conservation of energy." 80096-1

Western proposes modifications to the PEIS, as addressed in the enclosure, to appropriately assess wind project impacts on the transmission system. A copy of these comments will be provided to Argonne National Laboratory per your instructions. With our support as a cooperating agency, making these modifications will

have little or no impact on the schedule for the issuance of the final PEIS. Furthermore, by incorporating these modifications, the transmission issues would be addressed from a policy and program standpoint and provide for our adoption of the BLM PEIS for our future actions. 80096-1 (cont.)

We support your development of comprehensive policies and best management practices, as well as the use of tiering project-specific environmental analyses and decisions to the PEIS and its Record of Decision. We commend you for your excellent work on the draft PEIS. 80096-2

We would appreciate a prompt response to our request to be a cooperating agency. I have designated Ms. Shane Collins, our Natural Resources Manager, as your point of contact. Ms. Collins will provide the resources to ensure Western's needs are appropriately addressed in the development of the final PEIS. She may be reached at 720-962-7252 or by e-mail at collins@wapa.gov.

Sincerely,

for Michael S. Hacskaylo
Administrator

Enclosures

cc:
BLM Wind Energy Programmatic EIS
Argonne National Laboratory EAD/900
9700 S. Cass Avenue
Argonne, IL 60439

Director, Office of NEPA Policy and Compliance, EH-42, Washington, DC

BLM Wind Energy Programmatic EIS
Argonne National Laboratory EAD/900
9700 S. Cass Avenue
Argonne, IL 60439

RE: Western Area Power Administration (Western), U.S. Department of Energy (DOE), comments on the Bureau of Land Management (BLM) *Draft Programmatic Environmental Impact Statement on Wind Energy Development on BLM-Administered Lands in the Western United States, DES 0441*

Section 2.2 Description of the Proposed Action – A number of the proposed policies and best management practices (BMPs) would be applicable to transmission system additions needed to support wind development. The list of policies and BMPs should be revised and augmented to address transmission system additions. 80096-3

Section 2.4.2 Proposed Wind Energy Projects Currently under Review – The Valley County Wind Energy Project proposed by Wind Hunter LLC in Montana and the Senator Mountain Wind Energy Project proposed by Western Wind Energy in Arizona should be included. Western will be participating with BLM in the environmental reviews for these projects. Western helped facilitate a comprehensive research study in California now known as the Hetch Hetchy PIER Project. The wind resource assessment part of this study should be included in the BLM EIS. For more information on the study please, contact Ray Dracker, Center for Resource Solutions, 415-561-2135. An overview of the study can be found at: http://www.resource-solutions.org/PIER/PIERemphasis1.htm. 80096-4

Section 3 Overview of Wind Energy Projects – We suggest adding a new section with a description that addresses "Transmission Considerations" that need to be considered by a wind developer in demonstrating that transmission outlets are available for its wind power. For Western, requests for interconnection are processed in accordance with Western's *General Requirements for Interconnection*. Interconnection is a separate but parallel process to other processes, including the transmission service request process set forth in Western's Open Access Transmission Service Tariff (63 *Federal Register* 521). We are updating the Tariff largely to adopt the principal features of Federal Energy Regulatory Commission's (FERC) Standard Large Generator Interconnection Procedures and Standard Large Generator Interconnection Agreement. We expect to file this revision in early January. A proposed interconnection must not degrade the reliability or operating flexibility of the existing power system, and must meet the North American Electric Reliability Council's Planning Standards and Operating Manual procedures. For interstate transmission providers other than Western, FERC has issued orders and guidance on interconnection and transmission open access policy that apply to wind energy projects. 80096-5

Section 5 Potential Impacts of Wind Energy Development and Analysis of Mitigation Measures – Some modifications are needed to this section to include transmission-related developments for wind energy projects. Several of the site construction and mitigation 80096-6

measures are consistent with transmission-related developments. Western is available to work with you in modifying this section. 80096-6 (cont.)

Section 6.1 Impacts of the Proposed Action – Section 6.4.3, Related Transmission Line Construction, is addressed under cumulative impacts. Related transmission line construction would be a direct result of a wind developer's request for interconnection and transmission service rather than to meet future power demands as noted. A proposed wind farm development would not be viable unless it has demonstrated that firm arrangements for interconnection with the electrical transmission system are available. Since a firm transmission arrangement is needed to make a wind farm development economically viable, a discussion on related transmission line construction impacts should be addressed under Section 6.1. The list of concerns and issues presented in Section 6.4.3 should be addressed under Section 6.1. Some modifications are required to be consistent with current transmission-related siting policies and practices, including Federal Land Policy and Management Act provisions addressing the designation of existing transportation and utility corridors pursuant to Section 503 of the act without further review. New corridors may need to be designated to support wind development. Western is available to work with you in making the modifications. 80096-7

DEC 19 2003

BLM Wind Energy
Programmatic EIS Scoping
Argonne National Laboratory EAD/900
9700 S. Cass Ave.
Argonne, IL 60439-9902

Dear Programmatic EIS Team Lead:

The Western Area Power Administration (Western) wishes to thank you for the opportunity to participate in a recent scoping meeting where information was provided about the Bureau of Land Management's (BLM) decision to develop a Programmatic Environmental Impact Statement (PEIS) for BLM's National wind energy program and additional related policy to be applied on BLM-administered lands in the western United States (excluding Alaska).

Western, as a Federal power marketing administration within the Department of Energy, has responsibility for the safe and continuous delivery of electric power to customers located in 15 western states. In order to meet the demands of such a large customer base, Western owns and/or operates more than 17,000 miles of transmission lines and has numerous stationary facilities that support the transmission system. These support facilities include substations, switchyards, metering stations, and communication sites.

Western also operates several control areas and as a result is required to operationally support new generating resources with ancillary services, either directly if available from our own resources or by acquisition of needed services from others. Because Western has such a large presence in several western states, we have already been contacted by wind energy proponents to provide interconnections for wind developments. Western also is actively involved with several Federal agencies that have asked Western to act as their agent to acquire renewable resources or renewable energy certificates, which promote the development of resources such as wind.

The PEIS that BLM is proposing to undertake, particularly as it relates to development of a "National wind energy program and policy," must also consider the impact of wind development on the electric transmission system. It is not uncommon for potentially productive wind sites to be located in areas with limited transmission capability (the potential wind energy is likely to exceed the local capability to absorb it, requiring transmission in that area). A National policy could lead to large scale development that will require construction or rebuild of numerous transmission lines, resulting in other environmental consequences. These impacts must also be addressed in the PEIS. Another related issue is the potential for changes in existing generating patterns to accommodate the intermittent nature of wind generation.

Western, as a Federal agency, may also have information available that would be useful in completing National Environmental Policy Act requirements for wind energy projects at specific wind generation sites, whether Western has an interconnection role or not. Where wind energy projects are proposed on public lands, and Western facilities are located in the same area,

Western may already have environmental information it can share with BLM. Where the proponent of a wind energy project wants to connect to the power grid using facilities owned or operated by Western, we would need to assess the need to take a lead agency role and conduct project specific environmental reviews. Also, Western would be interested in the final programmatic EIS, as it may provide useful information for future Western transmission line upgrade and addition proposals.

At this early stage in development of the EIS, Western would like to meet with your staff and/or BLM representatives to further explore and develop ways BLM and Western can assist one another with wind energy on public lands. Using our Geographic Information Systems program, and through coordination with Department Of Energy's National Renewable Energy Laboratory in Golden, Colorado, we may be able to provide map products that show Western's facilities in relation to identified sites on public lands that have potential for development of wind energy.

Finally, please add Western to your list of contacts and your mailing list for this PEIS effort. In addition, please feel free to contact Ms. Susan Starcevich, telephone 720-962-7275; e-mail starcevi@wapa.gov, for any assistance you may require in determining Western's role in development of the programmatic EIS.

Sincerely,
C. Shane Collins

C. Shane Collins
Natural Resources Manager

bcc:
A0020, B. Fullerton
A7000
A7400
A7500-OF
A7520
D.Gaul, A7550.LV, Loveland, CO
N. Stas, B0400. BL, Billings, MT
H. Hernandez, B5521,HU, Huron, SD
A. Wood, B5522.BS, Bismarck, ND
J. Holt, G0400, Phoenix, AZ
C. Cristelli, G5605, Phoenix, AZ
J. Hartman, J0400, Loveland, CO
R. Steinbach, J6100, Loveland, CO
C. Palmer, L6400, Salt Lake City, UT
B. Thomas, N0400, Folsom, CA
L. Castle, N1610, Folsom, CA

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Responses for Document 80096

80096-001: Section 6.4.3 acknowledges that wind energy development on BLM-administered lands may require the construction of new transmission lines. Such construction is considered to be a separate but related activity and will require interagency cooperation and multidisciplinary environmental reviews. The designation of new transmission corridors on BLM-administered lands will occur as a result of interagency consultations, not as a unilateral decision by the BLM. Any such designations would be evaluated through either regional or local land use planning efforts, with opportunities for full public involvement. The potential impacts of transmission system interconnects or expansions that would be required by an individual wind energy project on BLM- administered lands will be assessed as part of the site-specific analyses, with input from other federal, state, and local agencies, and interested stakeholders.

New text has been added to Section 6.4.3, on the basis of input from the Western Area Power Administration, to describe the existing and proposed rules and regulations governing wind project grid interconnections and transmission system upgrades. These regulations will be applicable to wind energy development projects on BLM-administered lands. The BLM appreciates the Western Area Power Administration's contributions to the PEIS.

80096-002: Thank you for your comment.

80096-003: Section 6.4.3 acknowledges that wind energy development on BLM-administered lands may require the construction of new transmission lines. Such construction is considered to be a separate but related activity and will require interagency cooperation and multidisciplinary environmental reviews. The potential impacts of transmission system interconnects or expansions that would be required by an individual wind energy project on BLM-administered lands will be assessed as part of the site-specific analyses, with input from other federal, state, and local agencies, and interested stakeholders. Many of the proposed BMPs may be relevant to transmission system additions and will be evaluated for applicability during the site-specific analyses. No text change has been made to the document in response to your comment.

80096-004: The limited wind energy development alternative considers additional wind energy development on BLM- administered land in areas where it currently exists, will be under review, has been approved for development at the time the ROD for the PEIS is established. When the Draft PEIS was prepared, it was determined that only six locations were likely to meet these criteria by the time the ROD will be published (anticipated in July 2005). Although applications for additional ROW authorizations for both site monitoring and testing and

commercial development may have been submitted to the BLM or may be under consideration by developers, the scope of the limited wind energy development alternative will not be expanded. Including additional projects would not substantively alter the conclusions of the PEIS regarding the alternatives.

Additional information that may become available about wind energy development within the 11-state study area will be considered during site-specific analyses.

80096-005: New text has been added to Section 6.4.3, on the basis of input from the Western Area Power Administration, to describe the existing and proposed rules and regulations governing wind project grid interconnections and transmission system upgrades. These regulations will be applicable to wind energy development projects on BLM-administered lands. The BLM appreciates the Western Area Power Administration's contributions to the PEIS.

80096-006: Chapter 5 has not been modified to include transmission-related developments for wind energy projects. The potential impacts of transmission system interconnects or expansions that would be required by an individual wind energy project on BLM-administered lands will be assessed as part of the site-specific analyses, with input from other federal, state, and local agencies, and interested stakeholders. It is agreed that much of the discussion and the recommended mitigation measures contained in this chapter may be relevant to transmission system additions; these will be evaluated for applicability during the site-specific analyses.

80096-007: Section 6.4.3 acknowledges that wind energy development on BLM-administered lands may require the construction of new transmission lines. Such construction is considered to be a separate but related activity and will require interagency cooperation and multidisciplinary environmental reviews. The designation of new transmission corridors on BLM-administered lands will occur as a result of interagency consultations, not as a unilateral decision by the BLM. Any such designations would be evaluated through either regional or local land use planning efforts, with opportunities for full public involvement. The potential impacts of transmission system interconnects or expansions that would be required by an individual wind energy project on BLM- administered lands will be assessed as part of the site-specific analyses, with input from other federal, state, and local agencies and interested stakeholders.

New text has been added to Section 6.4.3, on the basis of input from the Western Area Power Administration, to describe the existing and proposed rules and regulations governing wind project grid interconnections and transmission system upgrades. These regulations will be applicable to wind energy

development projects on BLM-administered lands. The BLM appreciates the Western Area Power Administration's contributions to the PEIS.

80096-008: The BLM appreciates the level of interest exhibited by the Western Area Power Administration (Western) in this PEIS. Subsequent meetings between the BLM and Western have resulted in improvements to the PEIS, particularly with respect to new text incorporated into Section 6.4.3, regarding transmission system considerations. The BLM thanks Western for its participation and contributions.

Document 80097

WindEISArchives

From: windeiswebmaster@anl.gov
Sent: Tuesday, December 14, 2004 3:02 PM
To: WindEISArchives
Subject: Wind Energy EIS Comment 80097

Thank you for your comment, Sherry Bolden.

The comment tracking number that has been assigned to your comment is 80097. Once the comment response document has been published, please refer to the comment tracking number to locate the response.

Comment Date: December 14, 2004 03:02:04PM CDT

Wind Energy EIS Draft Comment: 80097

First Name: Sherry
Middle Initial: A
Last Name: Bolden
Address: 300 Alden Court
City: Windsor
State: CA
Zip: 95492
Country: USA
Privacy Preference: Don't withhold name or address from public record

Comment Submitted:
I believe that wind energy production (as well as any other renewable source of energy)is extremely benifical for the environment as well as providing jobs and education for the citizens in this country. It's not likely that those jobs could be outsourced (although Americans are pretty creative)and to be involved in the research and developement in reNEWables. Citizen could be trained to install solar or wind plantations or determine an appropriate renewable source of energy for private or public buildings and offices. 80097-1
This is my suggestion as I have do this and would like to be involved in the installation of renewable resources and would like to do it again.
It is important for our future and the planet's.

Questions about submitting comments over the Web? Contact us at: windeiswebmaster@anl.gov or call the Wind Energy EIS Webmaster at (630)252-6182.

Response for Document 80097

80097-001: Thank you for your comment. We appreciate your input and participation in the public review process.

Document 80098

WindEISArchives

From: windeiswebmaster@anl.gov
Sent: Thursday, December 16, 2004 6:48 PM
To: WindEISArchives
Subject: Wind Energy EIS Comment 80098

FinalBLMletter_8009
98.doc (43 K...

Thank you for your comment, Melinda Dorin.

The comment tracking number that has been assigned to your comment is 80098. Once the comment response document has been published, please refer to the comment tracking number to locate the response.

Comment Date: December 16, 2004 06:47:58PM CDT

Wind Energy EIS Draft Comment: 80098

First Name: Melinda
Last Name: Dorin
Organization: California Energy Commission
Address: 1516 Ninth Street MS-40
City: Sacramento
State: CA
Zip: 95814
Country: USA
Privacy Preference: Don't withhold name or address from public record
Attachment: C:\Documents and Settings\mdorin\My Documents\Wind\FinalBLMletter.doc

Comment Submitted:
A signed copy of the letter will follow in the mail.

Questions about submitting comments over the Web? Contact us at: windeiswebmaster@anl.gov or call the Wind Energy EIS Webmaster at (630)252-6182.

STATE OF CALIFORNIA — THE RESOURCES AGENCY ARNOLD SCHWARZENEGGER, *Governor*

CALIFORNIA ENERGY COMMISSION
1516 NINTH STREET
SACRAMENTO, CA 95814-5512

December 16, 2004

Mr. Ray Brady
Group Manager, Lands and Realty
Bureau of Land Management
United States Department of the Interior
Washington, D.C. 20240

RE: Draft Programmatic Environmental Impact Statement on Wind Energy Development on BLM-Administered Lands in the Western United States

Dear Mr. Brady:

The California Energy Commission has several comments on the Programmatic Impact Statement (Statement) on Wind Energy Development. The Energy Commission is supportive of wind development in order to meet the Renewable Energy Portfolio Standard for the State, and is exploring the concept of designating or "banking" certain areas for wind development, some of which may be on Bureau of Land Management (BLM) administered lands. In order to ensure that the development is pursued in an environmentally sound manner we request that the following items be addressed in the Final Statement. 80098-1

Biological Resources

- The Final Statement should include a discussion regarding configuration standards for transmission and distribution lines to ensure they are safe for birds. The Energy Commission is concerned about bird kills resulting from electrocutions and collisions. Safety standards that reduce the chance of electrocutions can be found in APLIC guidelines.[1] 80098-2

- In most cases, baseline surveys of bird use in the project areas should be conducted to determine the potential for impacts. These surveys should follow established protocol and be conducted for a full year to capture seasonal 80098-3

[1] APLIC (Avian Power Line Interaction Committee). 1996. Suggested practices for raptor protection on power lines: the state of the art in 1996. Edison Electric Institute. Washington D.C.

differences.[2] The Final Statement should require that survey results be included and discussed in the project specific Plans of Development. 80098-3 (cont.)

- The Final Statement should include a discussion of how rotor speed, rotor diameter, blade height from the ground and turbine plaement can contribute to the risk of bird and bat collisions with turbine blades. The Final Statement should discuss measures to mitigate impacts to birds and bats from collisions and wind energy development in general. The Final Statement should also require that each project specific Plan of Development include specific mitigation measures to mitigate impacts to birds and bats from collisions. 80098-4

- The Final Statement should establish a framework that requires the specific projects to implement the following mitigation measures and Best Management Practices: 80098-5
  - Use the baseline bird use survey results to site wind turbines in areas that avoid the highest bird use;
  - Require habitat compensation to mitigate for habitat loss and bird fatalities;
  - Require bird use monitoring and dead bird searches during operation to determine the level of bird fatalities; and
  - Require a contingency plan to remove or re-locate turbines determined to be causing greater than expected numbers of bird fatalities

- In the discussion of decommissioning, the Final Statement should require the removal of derelict turbines as soon as they become inoperable and include the terms of turbine removal in the BLM right of way permit as part of project closure or repower requirements. 80098-6

Land Use

- The issue of installing new electric transmission lines and/or expanding transmission line corridors needs to be addressed in more detail. For example, cities like Lancaster, north of Los Angeles, are experiencing significant growth that may conflict with the need for new transmission lines to deliver wind-generated power and related development of transmission corridors. 80098-7

- Wind development projects must be consistent with local land use regulations, which are usually city or county general plans and zoning restrictions. The land use discussion in Chapter 5.10 of the Statement does not discuss this issue and instead notes that the construction and operation of a wind energy project would 80098-8

[2] Anderson, Richard et al. 1999. Studying Wind Energy/Bird Interactions: A Guidance Document Metrics and methods for determining or monitoring potential impacts on birds at existing and proposed wind energy sites. National Wind Coordinating Committee. Washington D.C.

have an impact on land use if it would "conflict with existing environmental plans and community goals." Please discuss the need for consistency with local regulations, plans and policies, which can include, but are not limited to environmental plans and community goals. 80098-8 (cont.)

- The discussion of potential impacts of wind development projects on military restricted airspace is useful. It may also be appropriate for the Final Statement to include an overview map of BLM lands with restricted airspace areas in California, which also depicts the most favorable sites for wind development. 80098-9

Thank you for the opportunity to comment on the Draft Statement. If you have any questions on land use issues please contact James Adams at (916) 653-0702 or e-mail at jadams@energy.state.ca.us. For questions or comments about biological resources please contact Melinda Dorin at (916) 654-4024 or e-mail at mdorin@energy.state.ca.us. We look forward to receiving a copy of the Final Statement.

Sincerely,

ROGER E. JOHNSON, Manager
Environmental Office

Responses for Document 80098

80098-001: Thank you for your comment. We appreciate your input and participation in the public review process.

80098-002: The BMPs presented in Section 2.2.3.2 include a BMP calling for facilities to be designed to avoid perching and nesting by birds, thus reducing electrocution potential.

80098-003: As required by the Wind Energy Development Program proposed policies and BMPs (Section 2.2.3), site- and species-specific analyses, including predesign and preconstruction biotic surveys, will be conducted for any proposed project on BLM-administered lands. The scope and approach for these analyses will be determined on a project-by-project basis in conjunction with input from other federal, state, and local agencies, and interested stakeholders. Through this process, the BLM will develop project-specific siting, design, monitoring, construction, and operation stipulations for incorporation into the POD. The specification of site- and species- specific analyses is beyond the scope of the PEIS. No text change has been made to the document in response to your comment.

80098-004: The PEIS addresses these issues in Section 5.9.3.2.3 and in the text boxes in this section. The language on the Wind Energy Development Program proposed policies and BMPs has been reworded in the Final PEIS to indicate that these policies and BMPs are required, not suggested, elements of any wind energy development activity on BLM-administered land. With regard to specific mitigation measures, these would be developed at the project level for any wind energy project proposed for BLM-administered lands. Specification of specific mitigation measures, as well as details regarding the design and implementation of any such measures, will be determined on a project-by-project basis in conjunction with input from other federal, state, and local agencies, and interested stakeholders. Through this process, the BLM will develop project-specific mitigation measures for incorporation into the POD. Site-specific analyses are beyond the scope of the PEIS. No text change has been made to the document in response to your comment.

80098-005: The Wind Energy Development Program proposed policies and BMPs, as listed in the Final PEIS, establish such a framework as suggested by the comment, and require wildlife surveys during the project planning phase, as well as monitoring during all phases of a wind energy project. The specific designs of these surveys and monitoring plans will be developed on a site-specific, project-by-project basis and in conjunction with input from appropriate federal, state, and local agencies, and interested stakeholders. The proposed Wind Energy Development Program also incorporates adaptive management strategies to ensure that the

potential adverse impacts of wind energy development will be mitigated to the fullest extent possible.

80098-006: Operators will be required to repair, replace, or remove inoperative turbines in a timely manner. Requirements to do so will be incorporated into the due diligence provisions of the ROW authorization. Failure to demonstrate due diligence in the repair, replacement, or removal of turbines may result in termination of the ROW authorization. A BMP addressing this issue has been added to Section 2.2.3.2.4, Operations.

80098-007: Section 6.4.3 acknowledges that wind energy development on BLM-administered lands may require the construction of new transmission lines. Such construction would constitute a separate but related activity and would require interagency cooperation and multidisciplinary environmental reviews. The designation of new transmission corridors on BLM-administered lands will occur as a result of interagency consultations, not as a result of a unilateral decision by the BLM. Any such designations would be evaluated through either regional or local land use planning efforts, with opportunities for full public involvement. The potential impacts of transmission system interconnects or expansions that would be required by an individual wind energy project on BLM-administered lands will be assessed as part of the site-specific analyses, with input from other federal, state, and local agencies, and interested stakeholders.

New text has been added to Section 6.4.3 to describe the existing and proposed rules and regulations governing wind project grid interconnections and transmission system upgrades. These regulations will be applicable to wind energy development projects on BLM-administered lands. In addition, under Section 2.2.3.1, Proposed Policies, the 9th bullet addressing required NEPA analyses has been reworded to define how NEPA analyses of proposed wind energy development on adjacent private or state-owned lands will be conducted.

80098-008: City or county general plans and zoning restrictions would be among the considerations that would be addressed for site-specific projects. All wind development projects would have to consider local regulations, plans, and policies. The 1st BMP under the General heading in Section 2.2.3.2.2, Plan of Development Preparation, requires that appropriate agencies be contacted early in the planning process to identify potential local and regional land use issues. No text change has been made to the document in response to your comment.

80098-009: Figure 4.7.3-1 shows the locations of military operations areas (MOAs), military training areas (MTAs), and areas of medium or high wind potential. As discussed in Section 5.10.5, both the DoD and FAA will need to be contacted for potential air safety concerns and requirements for site-specific projects. No text change has been made to the document in response to your comment.

Document 80099

WindEISArchives

From: windeiswebmaster@anl.gov
Sent: Thursday, December 16, 2004 9:32 PM
To: WindEISArchives
Subject: Wind Energy EIS Comment 80099

WindDPEIScomment_80099.doc (51...

Thank you for your comment, Corina Wachter.

The comment tracking number that has been assigned to your comment is 80099. Once the comment response document has been published, please refer to the comment tracking number to locate the response.

Comment Date: December 16, 2004 09:32:29PM CDT

Wind Energy EIS Draft Comment: 80099

First Name: Corina
Last Name: Wachter
Address: PO Box 5175
City: Arcata
State: CA
Zip: 95518
Country: USA
Email: cmw15@humboldt.edu
Privacy Preference: Don't withhold name or address from public record
Attachment: C:\Documents and Settings\cmw15\Desktop\WindDPEIScomment.doc

Comment Submitted:
see attached memo, thank you

Questions about submitting comments over the Web? Contact us at: windeiswebmaster@anl.gov or call the Wind Energy EIS Webmaster at (630)252-6182.

MEMORANDUM

TO: BLM WIND ENERGY PROGRAMMATIC EIS
ARGONNE NATL. LAB EAD/900
9700 S. CASS AVE.
ARGONNE, IL 60439

FROM: CORINA WACHTER
HUMBOLDT STATE UNIVERSITY
ENVIRONMENTAL RESOURCES ENGINEERING STUDENT

SUBJECT: WIND ENERGY DRAFT PROGRAMMATIC EIS
DATE: 1/10/2005
CC: SHERI WOO

COMMENTS AND CRITIQUE OF SELECTED SECTIONS OF THE WIND ENERGY DRAFT PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT

SUMMARY

This memo presents a critique of, and recommendations for improving, the Wind Energy Draft Programmatic EIS (DPEIS) prepared by the Bureau of Land Management (BLM). The memo first gives a background summary of the DPEIS. It then points out a major weakness in the wording used in the Best Management Practices (BMP's) and Mitigations sections of the DPEIS, where use of the word "should" is prevalent, rendering all BMP's and mitigations optional. The memo then evaluates the efficacy and understandability of the document, pointing out several specific instances where wording could be strengthened, protections of Native American Sacred Sites improved, and a mis-named link on the document web page. This critique then goes on to assess the methods used in the WinDS model, and the contribution that the model makes to the DPEIS. Lastly, conclusions and recommendations for the preparers of the DPEIS are presented.

BACKGROUND

The Draft Programmatic EIS on Wind Energy Development (the DPEIS) on BLM-administered lands in the Western US presents an assessment of impacts that may be associated with development of wind energy on BLM-administered lands in the Western US region. The states that are included in this region are: Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah,

Washington, and Wyoming. The purpose and need statement of the DPEIS is to "support wind energy development on public lands and also to minimize potential environmental and sociocultural impacts."

The BLM assessed the potential magnitude of future wind activities and land use plan amendments, and presents three alternatives. The proposed action is the implementation of a Wind Energy Development Program; also analyzed are the no action alternative, and a limited wind energy development alternative. The DPEIS then summarizes the impacts associated with adoption of each alternative, including long-term and cumulative impacts, and suggests possible mitigation measures for each of the potential impacts.

BEST MANAGEMENT PRACTICES AND MITIGATION PROCEDURES ARE ONLY RECOMMENDATIONS, NOT REQUIREMENTS (CHAPTERS 2 AND 5)

The Use of "Should" as Opposed to "Shall" Makes the Document Impotent

The Plans of Development (POD's) that the proposed program would require for each individual project are to incorporate mitigation measures, but none of the BLM-specific wind energy mitigation measures are required; the measures merely "should" be implemented. There are 13 policies under the proposed action, including: off-limits lands; non-prevention of other land uses; consultation with federal, state, and local agencies, as well as Indian Tribal governments and The Department of Defense; amendment of existing land use plans; Field Office determination of the level of assessment required for a project; Categorical Exclusion status for site monitoring and testing; requirement of a Plan of Development; sage-grouse habitat conservation; visual resource value consideration; consultation regarding upgrades and changes; and incorporation of adaptive management strategies. Of the several hundred Best Management Practices (BMP's) and mitigation measures presented in Chapters Two and Five, only seven use indicate that they are required. The required measures are: 80099-1

- Documentation of accidental hazardous waste releases, their causes, corrective actions taken,
- Compliance with FAA regulations, including a notice of proposed construction,
- Informal consultation under Section 7 of the Endangered Species Act if federally listed endangered species are present,

- Nacelle-mounted lights that flash white during the day and red at night,
- Consultation with Native American governments, as required by the National Historic Preservation Act,
- A paleontological survey if a project area is determined to have a high potential for fossil remains,
- Roads designed "to an appropriate standard no higher than necessary to accommodate their intended functions."

Documentation of a hazardous waste release is not mitigation: the clean-up and removal efforts are. The document does not enumerate specific tasks required of the developer to remedy the situation. If other guidelines exist in BLM documents, or in the guidelines of other agencies, they should be referenced. There is no recourse provided in this DPEIS if the developer does not take appropriate action to mitigate a release.

Four of the required measures (compliance with FAA regulations, specification of Nacelle-mounted lights, informal consultation required if endangered species are present, and consultation with Native American Governments) are required by agencies other than the BLM, so they are not applicable and cannot be counted as BLM-required regualtions. 80099-1 (cont.)

Although a paleontological survey is required if there is a possibility of fossil remains in the area, the mitigations to occur in the event of their discovery are all presented using "should" wording, which relegates responsibility for insuring appropriate mitigations to the local Field Office.

To protect the environment and resources, mitigation measures cannot be conditional. It is understood that the writing of the document is intentionally broad to maintain its applicability, and that it was written in this way because not all of the mitigation measures are anticipated to be required for every wind energy project. However, this wording causes all BMP's and mitigations to be options dependent on local Field Office enforcement. Instead of making the mitigations and best management practices dependent on the judgment of the local BLM Field Officers, which will lead to inconsistency in their application, mitigation measures should be required based on the conditions of a specific site. Here is an example of a more effective BMP: "If there is a high potential for fossil remains to be present at a site, a paleontologist shall be consulted to develop a paleontological resources plan that will include the following components: management options, and criteria to

evaluate their efficacy, mitigation measures that include a collection strategy, and site monitoring to insure that all important paleontological resources are identified." In this example, the conditions that constitute a "high potential" would be explicitly specified. 80099-1 (cont.)

Many of the best management practices and mitigations that are suggested should be applied to every wind energy development site, regardless of site-specific characteristics.

EVALUATION OF DOCUMENT EFFICACY AND UNDERSTANDABILITY

The Link to Sections 5.10-5.15 is Mis-Labeled

The webpage that contains the links to the Adobe PDF's that comprise the document (found at http://windeis.anl.gov/documents/dpeis/index.cfm) has a mis-named link: the link that is titled "Sections 5.10 - 5.11" actually links to a PDF that contains Sections 5.10 - 5.15. There is no listing in the directory for Sections 5.12 – 5.15. 80099-2

Proposed Policies Do Not Adequately Address Native American Sacred Sites (2.2.3.1)

The list of lands that would be excluded from wind energy development under proposed policies (first bullet of 2.2.3.1) does not explicitly protect Native American sacred sites from development. Sacred sites are protected in this clause only if they are designated as part of the National Landscape Conservation System (NLCS). The fourth bullet requires that the BLM initiate consultation with Indian Tribal governments "as early in the planning process as appropriate," to address concerns that might arise, but this clause is weaker than the protection given to NLCS protected areas. Native American sacred sites deserve the same protection from development as the NLCS designated areas, and equally strong wording should be used. 80099-3

Recommendations for Strengthening Other Proposed Policy Areas

Field Office guidelines and/or checklists should be developed to standardize a procedure for determining the level of assessment that will be required for individual projects (bottom of pg. 2-7). 80099-4

On page 2-8, fourth bullet, referring to Visual Resource Management (VRM) attainment, "to the extent possible" wording is weak, and implies that projects could obtain ROW grants without 80099-5

mitigating impacts on visual resources, if the mitigation actions are considered, to some extent, impossible. 80099-5 (cont.)

The first bullet on pg 2-10, section 2.2.3.2.1, addresses new road construction, and says that new roads should "be constructed to the appropriate standard," but there is no definition of the appropriate standard. If other BLM documents that set forth standards of road construction, they should be referenced. 80099-6

Rationale for Using the WinDS Model is Unclear, as are Some of the Terms in Appendix B

The WinDS model is cited briefly in the text of the DPEIS as the source of estimates of economically developable land acreage in each state, but the model "does not identify where the economically developable BLM-administered land is located." Appendix B describes the model's workings, and the model is rather complicated, incorporating a number of factors to determine the "significant market issues pertaining to wind energy," but, despite the intricacy of the model, it can do nothing but predict the number of acres upon which wind installations are economically feasible. The value of the model is ambiguous: if it predicted the best development locations, its value would be clear, but the numbers that it produces do not seem to be worth the effort and time spent on the analysis. 80099-7

The WinDS model was run with one set of inputs, and no parameterization studies were done to determine how varying the inputs would affect the output. This is standard procedure for evaluating the sensitivity of any model, and yet it was overlooked. Due to the economic nature of the model, specific attention should be given to simulating the effects of varying market conditions; these are not economically stable times and it is nearly impossible that one set of economic predictions will be accurate. 80099-8

CONCLUSIONS AND RECOMMENDATIONS

To ensure that environmental impacts of specific projects are not overlooked, specific procedural guidelines should be developed to assist Field Officers who are evaluating a project proposal. Mitigation measure language should be strengthened to require measures that will mitigate the effects of a project. Native American sacred sites should receive the same level of protection as NLCS sites. 80099-9

Responses for Document 80099

80099-001: The language on the Wind Energy Development Program proposed policies and BMPs has been reworded in the Final PEIS to indicate that these policies and BMPs are required, not suggested, elements of any wind energy development activity on BLM-administered land.

80099-002: Thank you for your comment. The link has been corrected on the Web site.

80099-003: The locations of many sacred sites are often only known to Native Americans. This information is not provided to federal agencies in order to protect the sacred site. A system like the NLCS requires foreknowledge of the locations. As stated, this is generally not the case for sacred sites. Also, if this information was provided to the BLM it would not be appropriate to publish it in a forum such as the NLCS. Therefore, determining the presence of a sacred site is appropriately conducted through early scoping and consultation with the Tribes on a project-by-project basis.

80099-004: Thank you for your comment.

80099-005: The text has been revised to remove the phrase "to the extent possible."

80099-006: The BLM guidance documents that should be consulted regarding standards for road design, construction, and maintenance are referenced in the proposed BMP under the Roads heading of Section 2.2.3.2.2, Plan of Development Preparation, and in Section 5.6.5 on mitigation measures for transportation impacts. The documents are BLM Manual 9113 (BLM 1985) and the BLM *Surface Operating Standards for Oil and Gas Exploration and Development* (RMRCC 1989).

80099-007: The WinDS model identifies the best development locations for wind considering the economics of wind and those of other competing generation sources. The purpose of the modeling efforts in this PEIS is to provide a general framework of possible development over the next 20 years, in order to assess the potential spatial, environmental, social, and economic impacts of implementing a Wind Energy Development Program for BLM-administered lands.

80099-008: Many sensitivity runs have been conducted with the WinDS model for other purposes. However for this PEIS, it was desired to examine a case that was consistent with the future electricity demands and fuel prices estimated by the DOE Energy Information Administration in its Annual Energy Outlook 2004. The BLM recognizes that many other factors can also affect the accuracy of the projections, and, as discussed in Appendix B, a variety of factors will determine actual development levels. However, the Maximum Potential Development

Scenario (MPDS) and WinDS model results employed in the PEIS are adequate for forecasting potential development levels over such a large geographic area and long, projected time frame. Greater accuracy or sensitivities to these forecasts would not likely result in changes to the requirements of the Wind Energy Development Program; that is, the proposed policies and BMPs would not be changed at this time. The program requires that the BLM employ adaptive management strategies to the oversight of wind energy development on BLM-administered lands. The BLM will monitor the level of wind energy development into the future as well as the effectiveness of its policies and BMPs. If necessary, adjustments to the programmatic requirements will be made.

80099-009: The language on the Wind Energy Development Program proposed policies and BMPs has been reworded in the Final PEIS to indicate that these policies and BMPs are required, not suggested, elements of any wind energy development activity on BLM-administered land. Exclusions of any additional areas from wind energy development will be determined at the project level as part of the site-specific analyses or through local land use planning efforts, with opportunities for full public involvement. The scope and approach for site-specific analyses will be determined on a project-by-project basis in conjunction with input from other federal, state, and local agencies, Tribal governments through the government-to-government consultation process, and interested stakeholders.