United States Department of the Interior, Bureau of Land Management
Andrews Management Unit
Burns District
DECISION RECORD
Horizon Wind Energy Northwest X LLC
Pueblo Mountain Wind Energy Site Testing and Monitoring Project Area
Environmental Assessment
OR-08-026-098
Serial Number OR-63580

INTRODUCTION

Andrews Resource Area, Burns District, has prepared an Environmental Assessment (EA) to analyze whether or not and under what terms and conditions to amend and renew the Right-of-Way (ROW) grant OR-63580 to continue the authorized use of Bureau of Land Management (BLM) administered land for a wind energy site testing and monitoring project within the Pueblo Mountains.

AUTHORITY

The Horizon Wind Energy Northwest X LLC, Pueblo Mountain Wind Energy Site Testing and Monitoring Project Area (Horizon) EA is tiered to the Andrews Management Unit/Steens Mountain Cooperative Management and Protection Area Proposed Resource Management Plan/Final Environmental Impact Statement (AMU CMPA PRMP/FEIS), August 2004.

The decision has been designed to conform to the following documents, which direct and provide the framework for management of BLM lands within the Burns District:

a. AMU RMP/Record of Decision (ROD) (BLM, August 2005)
b. Final Programmatic EIS on Wind Energy Development on BLM-Administered Lands in the Western United States (BLM, June 2005)
c. ROD: Implementation of a Wind Energy Development Program and Associated Land Use Plan Amendments (BLM, December 2005)
d. BLM Instruction Memorandum (IM) 2006-216, ROW Management, Wind Energy (2006); and
   BLM IM 2009-043, ROW Management, Wind Energy (2009)
e. BLM Energy and Mineral Policy (BLM, August 2008)
f. BLM IM OR-2008-014, Wind Energy Testing and Monitoring Proposals in Sage-Grouse Habitat (2007)
g. National Environmental Policy Act (NEPA), 42 U.S.C. 4321-4347 (1970)
h. Federal Land Policy and Management Act (FLPMA), 43 U.S.C. 1701 (1976)
i. Code of Federal Regulations (CFR), Part 2800, ROW under FLPMA

DECISION

Having considered a range of alternatives and associated impacts and based on analysis in the Horizon EA OR-08-026-098, it is my decision to implement the Proposed Action allowing the ROW applicant to renew the existing ROW grant, OR-63580, for a wind energy site testing and monitoring project area for a term of 3 years as requested by Horizon in its application and Plan of Development (POD). In addition, the BLM will authorize the ROW grant providing the ability to install, operate, and maintain two new met poles; exclusive use for wind energy testing and monitoring on an additional 467.75 acres in the project area; and the ability to perform geotechnical studies as requested by the Applicant with additional terms and conditions from the BLM concerning the installation of met towers and geotechnical studies.

COMMENTS RECEIVED

A copy of the original EA was mailed to the Applicant, adjacent landowners, and interested publics. In addition, a notice was posted in the *Burns Times-Herald* newspaper on November 5, 2008.

The Burns District BLM received one comment letter from the Oregon Natural Desert Association (ONDA). Below are responses to their comments:

Comment 1: The 14-day public comment period fails to provide an opportunity for meaningful public input.

BLM Response: The Council on Environmental Quality (CEQ) regulations direct agencies to encourage and facilitate public involvement in the NEPA process to the fullest extent possible. While some public involvement is required in the preparation of an EA, the BLM has discretion to determine how much, and what kind of involvement works best for each individual EA. In this case, BLM determined this EA did not warrant a longer comment period because: 1) The EA was not complicated or extensive in nature (28 pages with appendixes), so review time should have been relatively short; 2) The Proposed Action could have been categorically excluded from NEPA analysis, however, BLM elected to prepare an EA; 3) The Proposed Action is essentially the same action as was brought before the Interior Board of Land Appeals (IBLA) under appeal in 2006 and the BLM was affirmed on all counts, March 5, 2008, IBLA-2007-48; and 4) The Proposed Action was not considered a borderline case, not unusual, possessed no known unique or appreciable scientific controversy about the nature of the effects, is not closely similar to one which would normally require preparation of an EIS, and not within a flood plain or wetland.

Comment 2: BLM must prepare an Environmental Impact Statement.

BLM Response: The analysis in the EA did not reveal any significant effects on the human environment that would warrant preparation of an EIS. The Finding of No Significant Impact (FONSI) considered the CEQ's criteria for significance (40 CFR 1508.27), both with regard to context and intensity of impacts and found the environmental effects, together with the application and POD for wind energy site testing and monitoring project area and the terms and conditions of the proposed ROW grant, against the tests of significance did not constitute a major Federal action having a significant effect on the human environment. Therefore, an EIS will not be prepared.

Analyzing individual turbines and transmission line towers is not "ripe" for analysis as mere testing of sites for meteorological viability does not obligate the Federal government to permit commercial wind energy development facilities (a wind farm) as stated in BLM IM 2006-216 and BLM IM 2009-043. A separate NEPA analysis will be prepared for a commercial wind energy development facility (wind farm) ROW under BLM serial number OR-65553.

Comment 3: BLM must study the impacts of its proposal on wilderness characteristics present in the area and the documentation concerning BLM's evaluation of wilderness values within ONDA's proposed WSAs must be included in the EA and NEPA analysis for the current proposed action and any connected actions.

BLM Response: An intensive inventory evaluating the presence or absence of wilderness character on the BLM-administered lands in the project area was completed in the early 1980s. The inventory found that wilderness character was not present on BLM-administered lands in the project area. In 2003, an interdisciplinary team reviewed and evaluated current conditions and information provided by ONDA for the wilderness inventory units that fall within the project area. No changes to conditions were identified that would modify the findings of the 1980 inventory. Based on that analysis, the BLM determined that its 1980's inventory finding that BLM-administered lands within the project area do not possess wilderness character remains valid. The BLM also reviewed the updated boundary information that ONDA submitted in 2006 which reduced the size of their Babes Canyon proposed Wilderness Study Area (WSA) due to the presence of unnatural features. The BLM's 2003 evaluation considered this same information in its naturalness determination and did not find outstanding opportunities for solitude or primitive and unconfined recreation, so ONDA's updated information would not modify BLM's 2003 wilderness inventory findings. As such, wilderness character was not analyzed further in the EA (see page 4 of EA).

In *ONDA v Shuford* (June 2007), the U.S. District Court upheld BLM's methodology and findings under NEPA and FLPMA, regarding the update of its wilderness inventory that was part of the planning process for the AMU ROD/RMP (August 2005). The Court found that the record in *Shuford* showed that BLM had evaluated existing information and information submitted by ONDA related to wilderness resources. Recently, the IBLA *[ONDA, 173 IBLA 348 (2008)]* found that when BLM has completed an inventory of the wilderness resource and reached the conclusion that no lands meeting the necessary wilderness criteria are present in the project area, there is no NEPA requirement that BLM include a wilderness resource discussion in an EA. The Court stated, "There is no NEPA requirement that BLM include a wilderness resource discussion in an EA, unless the proposed action will result in environmental impacts to such a resource. When BLM has compiled the 'hard data' in satisfaction of its FLPMA inventory obligation that support its determination that the requisite wilderness characteristics are not found within the project area outside of existing WSAs, that 'hard data' need not be repeated in the EA concluding that no impact will occur to the wilderness resource." *[ONDA, 173 IBLA 354 (2008)]*

Comment 4: BLM's methodology related to its wilderness inventory update of BLM-administered lands in the project area is not adequate to support its findings.

BLM Response: See response to Comment 3.

Comment 5: Even if BLM properly evaluated wilderness characteristics at the land use planning level during those 2003 internal reviews, it now has a duty to do so now in the context of this site-specific proposal. By not updating its wilderness inventory in the project area at the time of the current site-specific project planning, BLM would violate its obligation under the Federal Lands Policy and Management Act ("FLPMA"), 43 U.S. C. § 1711(a), by failing to keep a current inventory of wilderness values.

BLM Response: The wilderness inventory update that the BLM completed in 2003 as part of the planning process for the AMU ROD/RMP (August 2005) provides an adequate environmental baseline for the wilderness resource (see Response to Comment 3) in the project area. There is no NEPA or FLPMA requirement that BLM perform a new wilderness inventory every time BLM analyzes the impacts of a proposed project, so long as BLM utilizes an adequate environmental baseline of resources in its NEPA analysis. Neither FLPMA nor the courts prescribe any particular methodology with respect to the timing of BLM's resource inventories. Broad-scale landscape factors that cause areas to lack wilderness character do not shift rapidly. Gradual changes can be ascertained over longer periods of time and, in the absence of information to the contrary, inventories can be deemed to be "current" for resource evaluation and planning purposes. In the meantime, where wilderness values are found to exist, changes resulting from management actions are evaluated and documented in NEPA analyses. ONDA's comments on this project represent a disagreement about BLM's methodology and findings which have been upheld (see response to Comment 3) and do not represent a significant change in actions, circumstances, or information about on-the-ground conditions for this project area.

Comment 6: Now that the project has moved to a sufficiently concrete state to be able to accurately evaluate the probable locations of the turbines and related infrastructure, BLM must evaluate the impact of development at those locations on the wilderness and roadless values present in the project area and the surrounding lands.

BLM Response: An agency need not consider the impacts of projects that will occur later in time and can be changed in the interim. For example, in Northern Alaska Environmental Ctr. V. Lujan, 961 F.2d 886 (9th Cir. 1992) the Sierra Club claimed that the National Park Service's EIS was inadequate because it failed to consider potential cumulative and synergistic effects of future mining. The Court held that the EIS was sufficient because later analysis of those effects was not foreclosed. Id. at 891. Instead, each EIS expressly provided that the Park Service would, consistent with NEPA, make an environmental assessment of any future application for a mining permit submitted to it for approval. Id. Here, as in Northern Alaska Environmental Ctr. V. Lujan, future wind power development, both at the site and in the vicinity, is speculative.

NEPA does not require an agency to consider in an EA impacts of other possible actions that are speculative or hypothetical. *See, e.g.*, *Glacier-Two Medicine Alliance*, 88 IBLA at 143 n.7. As this Board held in *G. Jon and Katherine M. Roush*, 112 IBLA 293, 306 (1990): BLM is only required to consider cumulative impacts which "might be expected." *In re Long Missouri Timber Sale*, 106 IBLA 83, 86 n.2 (1988). Appellants merely assert that cumulative impacts might occur without offering any evidence as to what these impacts might be or the likelihood of their occurrence. The mere assertion that cumulative impacts will occur as a result of a planned action is not sufficient to require BLM to consider cumulative impacts. *See In re Letz Boogie Timber Sale*, [102 IBLA 137,] 142 n.8 [(1988)]; *In re Blackeye Again Timber Sale*, [98 IBLA 108,] 110-11 [(1987)]. Annunziata Gould, 176 IBLA 48, 40-41 (2008).

Because a commercial wind energy development facility, OR-65553, has just been submitted to the BLM and studies have not started, it would be speculative to include the effects of such development in the cumulative effects analysis for this EA which is a separate application and NEPA process, as stated in BLM IM 2006-216 and BLM IM 2009-043.

Comment 7: BLM has an obligation to review ONDA's wilderness inventory data, update BLM's wilderness inventory, and to study impacts to wilderness, and roadless values in non-WSA roadless areas in the context of this site-specific action, during this NEPA process.

BLM Response: As described in BLM's response to Comments 3, 5, and 6, BLM has updated its wilderness inventory and as part of that process considered ONDA's wilderness inventory data. Given that wilderness character was not found present there is no NEPA requirement to analyze this resource further in the EA (see response to Comment 3).

With regard to roadless values, while BLM agrees that individual characteristics of wilderness may have some aspects in common with other multiple-use values of an area—such as recreation, scenery or habitat—BLM disagrees that an area can qualify as having wilderness value if not all of the required characteristics of wilderness are present. In order for an area to possess wilderness value, or qualify for potential management to protect wilderness value, it must have all of the necessary characteristics of wilderness. Wilderness is defined in the Wilderness Act and this definition is adopted in FLPMA. 43 U.S.C. § 1702(i) (providing that the term "wilderness" as used in section 1782 of FLPMA shall have the same meaning as it does in the Wilderness Act, 16 U.S.C. § 1131(c)). As the Ninth Circuit noted, "'wilderness characteristics' is a carefully-defined statutory concept, originating in the Wilderness Act." Oregon Natural Desert Association v. Bureau of Land Management ("ONDA v. BLM"), 531 F.3d 1114, 1142 (9th Cir. July 14, 2008). In the Wilderness Act, a "wilderness" is defined, "in contrast with those areas where man and his own works dominate the landscape," as:

> an area where the earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain. An area of wilderness is further defined to mean in this chapter an area of undeveloped Federal land retaining its primeval character and influence, without permanent improvements or human habitation, which is protected and managed so as to preserve its natural conditions and which (1) generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable; (2) has outstanding opportunities for solitude or a primitive and unconfined type of recreation; (3) has at least five thousand acres of land or is of sufficient size as to make practicable its preservation and use in an unimpaired condition; and (4) may also contain ecological, geological, or other features of scientific, educational, scenic, or historical value.

16 U.S.C. §1131(c). This definition makes clear that for an area to qualify as having wilderness value, it cannot just possess some of the characteristics of wilderness. For instance, solitude could well be found in the midst of an abandoned mine site, but it would hardly qualify as an area that is "affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable" and would thus not qualify as having wilderness value. Just as a wild and scenic river does not exist wherever there is water, so an area cannot be called wilderness just because it has a characteristic of wilderness. Wilderness is a carefully-defined concept, as Congress has explicitly enumerated the necessary size and set of characteristics that must exist for there to be "wilderness." If one of the required components is not present there can be, by definition, no "wilderness." If an area fails to meet a required criterion, then the individual criteria have no meaning within the context of wilderness.

Outside of the wilderness context, individual characteristics of wilderness have some aspects in common with other values associated with the definition of "multiple use" in FLPMA. This includes values such as recreation, watershed, wildlife and fish, and natural scenic values. 43 U.S.C. § 1702(c). Multiple-use management includes consideration of these values. Id. §§ 1702(c), 1711(a). For example, BLM may consider the presence or absence of roads in a NEPA document where relevant to values such as recreation, scenery, watersheds, fish and wildlife. Similarly, BLM may consider naturalness as part of the natural scenic value and may consider opportunities for solitude or primitive/unconfined recreation as part of an area's recreation value. In other words, where an area lacks all of the characteristics necessary for wilderness, individual characteristics may be considered as part of other multiple-use values but they do not amount to a wilderness resource. The EA did address several of these related resources that were identified as being affected in the EA (see EA Chapter III).

Comment 8: The EA assesses the impact of the two additional met towers on sage grouse, but does not consider the effects or any mitigation of impacts to sage grouse from the 225 test borings and the operations associated with those tests.

BLM Response: The EA addresses mitigation to the geotechnical studies in #22 of the stipulations on page 9. With the stipulation in place there would be no effects from the geotechnical studies since most of the sage-grouse cover has been removed from this project area and geotechnical studies would be conducted after nesting season. Recently the BLM released an updated wind policy, BLM IM 2009-043, which indicates the holder of the site testing and monitoring ROW grant should be advised that appropriate environmental and geotechnical studies and inventory information should be collected in conjunction with the wind energy site testing and monitoring studies during the 3-year term of the initial grant. The data gathered is an integral part of preparing the initial POD for a proposed wind energy development if an application is submitted in the future.

Comment 9: … now that the extent and layout of the eventual wind power development can be determined, BLM must proceed with a full analysis of the likely impact to sage grouse on the Pueblo Mountains from the development of the full-scale wind project.

BLM Response: As stated before, this will be done in an EIS.

Comment 10: Further habitat degradation, including fragmentation from use of off-road vehicles to construct and maintain met towers and conduct geotechnical studies, will impair sage grouse habitat and full-scale development in the project area will have even more serious impacts.

BLM Response: Habitat degradation will not occur from the use of off-road vehicles to construct and maintain met towers and conduct geotechnical studies. While All Terrain Vehicles will be used for the maintenance of met towers, trips to the towers are few during the course of a year. This will not fragment the habitat as alleged since the presence of a road or trail does not preclude wildlife use of the area. The amount of use that the route receives determines wildlife response to the amount of use. Also, different species of wildlife respond differently to the amount if disturbance. The geotechnical studies will be mainly on existing roads but may include driving once over an area to conduct the drilling. These core drillings would be conducted after nesting season for sage-grouse as well as for other migratory birds. The core drillings would be a one pass through with no road construction needed so the possibility of habitat fragmentation is none.

Comment 11: … it is critical to recover degraded habitat in order to avoid these species' decline toward listing and, ultimately, extinction.

BLM Response: Efforts are ongoing to try to restore habitat lost in the Pueblo Fire of 2006 and other large fires in sagebrush habitat around the District as stated in the EA on page 15.

Comment 12: In addition to failing to identify and evaluate the impacts from the project development and geotechnical testing on sage grouse, BLM's decision to site the new met towers 2 miles from known lek sites is inadequate. The scientific literature indicates there should be no manipulation of sagebrush habitats closer than a minimum of 3 miles to active leks. See, e.g., Connelly, J.W. et al., "Guidelines to Manage Sage-Grouse Populations and Their Habitats," Wildlife Society Bulletin 28 (2000): 967–985.

BLM Response: The proposal to locate the proposed new met towers at least 2 miles from known leks was based on BLM policy (BLM OR-2008-014) which restricts placement of met towers within 2 miles of an active lek or known occupied seasonal habitats or concentration areas. The reference to Connelly et al. (2000) when reviewing the article refers to vegetation manipulation within 5km (@ 3 miles) of a lek in the form of prescribed fire, herbicide use or other sagebrush control activities that would remove large acreages of sagebrush.

Comment 13: … the Oregon Department of Fish & Wildlife's ("ODFW") Oregon Sage Grouse Plan (2005), which BLM has not adopted, underscores that human activities and structures decrease the quality of sage grouse habitat and can result in habitat loss and direct bird kills.

BLM Response: The BLM is a signatory to the Oregon Strategy and has adopted the Strategy by being signers. The BLM is implementing the Strategy as referenced in the Andrews ROD and RMP (RMP page 35).

Comment 14: The strategy expressly provides at p. 83 that wind energy projects must be sited *at least 5 miles* from known sage grouse habitat. Specifically, ODFW's sage grouse conservation strategy recognizes that:

> Future developments of wind energy might have significant impacts on local breeding populations. Disturbances associated with construction and maintenance of turbines and subsequent power lines may displace nesting females. Wind energy grids (wind farms) should be constructed 8 km (5 miles) from known/occupied habitat. However, the placement of such a facility will require careful planning in sage-grouse range to minimize the potential impacts (Manville 2004).

BLM Response: The 5-mile distance of wind farm development from known/occupied habitat was based on research for prairie chickens in the plains states. Since no research had been completed for sage-grouse around wind turbines, the research recommendations have been challenged and ODFW is now recommending no wind turbines within 3 miles of a lek or known occupied habitat or seasonal concentration areas. The BLM will probably adopt this recommendation as this should become the new recommendation in the Strategy.

Comment 15: Because sage grouse is a candidate species being considered for listing under the Endangered Species Act, and because the area contains important sagebrush habitat for the species, we believe BLM's obligation to examine the environmental impacts of the proposed action on this species and its habitat, is heightened.

BLM Response: The greater sage-grouse is not a candidate species for listing under the Endangered Species Act. Its current status is a BLM Sensitive species. Just because, as you note in footnote 9 that "The protection provided by policy for candidate species shall be used as the minimum level of protection for BLM sensitive species," does not automatically raise the status to that of a candidate species as you imply in your comments. Candidate species are determined by the U.S. Fish and Wildlife Service (USFWS). The sage-grouse is listed as a Species of Concern by the USFWS and is currently under status review by the USFWS for possible listing as threatened or endangered in part or all of its current range. This determination has not been finalized yet and until this occurs, it is still considered a BLM sensitive species (6840 Manual .06E2).

The proposed placement of two new met towers outside of the 2-mile lek buffer and the geotechnical test borings was fully analyzed in this EA. While the area does still contain some sagebrush habitat, much of the habitat was removed by the Pueblo Fire in 2006. Efforts are under way to restore some of this habitat.

Comment 16: … the Endangered Species Act imposes obligations on agencies to consider the impacts of their actions on listed or candidate species.

BLM Response: See above response.

Comment 17: FLPMA requires BLM to manage the public lands for multiple use and sustained yield, ensuring its actions do not cause any unnecessary or undue degradation of the lands or their resource values, and ensuring against "permanent impairment" of the environment. Part of FLPMA's multiple use mandate includes conservation of food and habitat for fish and wildlife, and BLM must maintain the viability of the sage grouse's sagebrush habitat in the Pueblo Mountains area.

BLM Response: The scope of this project, installation of two met towers and the geotechnical studies will not cause any unnecessary or undue degradation of the public lands and will not permanently impair sage-grouse habitat in this area. Much of the area was burned in 2006 which removed most of the sagebrush in the ROW. There are ongoing efforts to restore the sagebrush but it is a slow process.

Comment 18: … the manual requires BLM to coordinate with FWS to determine the distribution, population dynamics, current threats, abundance and habitat needs for candidate species present in a project area.[9] BLM also must manage the habitat to conserve the species by, among other things, developing site-specific management plans and conservation strategies that incorporate specific habitat and population management objectives, ensuring BLM activities (such as authorization of livestock grazing or water development projects) are consistent with those objectives, and monitoring populations and habitats of candidate species. BLM also must request technical assistance from FWS on any planned action (such as issuance of a grazing allotment management plan) that may contribute to the need to list a candidate species as threatened or endangered. See Manual at .06C.

BLM Response: The greater sage-grouse is a BLM sensitive species and not a candidate species. In the 6840 Manual, .06 Policy, C. Candidate Species, Number 1 under this heading states (to use the correct wording from the 6840 Manual) the BLM shall:

1. In coordination with the FWS…,determine, to the extent practicable, the distribution, population dynamics, current threats, abundance, and habitat needs for candidate species occurring on lands administered by the BLM;….

To this extent, we have coordinated with ODFW since they are the most knowledgeable in Oregon on sage-grouse habitat needs and population status. They have commented on this project as it relates to sage-grouse habitat. If analysis in the EA had determined that this project would have a significant effect on sage-grouse status, habitat or contribute to the need to list the species as threatened or endangered, the BLM would have undertaken an EIS for this project to determine the extent of the effects or not considered continuing on with the project. As stated earlier, an EIS will be undertaken for the development of a wind farm in 2009-2011.

Comment 19: Because ground disturbing test borings are authorized as part of the Proposed Action, BLM must consider the full foreseeable project development as a connected action.

BLM Response: Unlike oil and gas leasing, where initial leasing implies an obligation to allow development, mere testing of sites for meteorological viability does not obligate the Federal government to permit wind development. Because the authorization to collect wind data does not automatically trigger the authorization to develop a wind energy development project, the two are not "connected actions" as defined by the NEPA regulations (40 CFR 1508.25).

In addition, BLM IM 2006-216 ROW Management, Wind Energy (2006) and BLM IM 2009-043 ROW Management, Wind Energy (2009) states, the holder of the site testing and monitoring ROW grant for a project area establishes no right to development and is required to submit a separate ROW application for commercial wind energy development to the BLM for analysis, review and decision. The interest retained by the holder of the site testing and monitoring ROW grant is only an interest to preclude other wind energy ROW applications during the term of the grant.

Currently analysis for commercial wind energy development facilities is not ripe. Only within the last few days has BLM received an updated application and preliminary POD for commercial wind energy development facilities. Before full analysis can proceed, the application must be finalized based on testing, cost recovery arrangements completed, a notice of intent to prepare an EIS published, public scoping undertaken and other preliminary processing toward preparation of an EIS. Renewal of the ROW grant for an additional 3-year period is necessary so that Horizon's wind monitoring, testing and other feasibility activities are properly authorized during the preparation of this EIS.

Comment 20: The EA fails to provide any concrete analysis of cumulative impacts.

BLM Response: The CEQ states "[g]enerally, agencies can conduct an adequate cumulative effects analysis by focusing on the current aggregate effects of past actions without delving into the historical details of individual past actions." This is because a description of the current state of the environment (Affected Environment by resource) inherently includes the effects of past actions.

Reasonably Foreseeable Future Actions (RFFA) are those for which there are existing decisions, funding, formal proposals, or which are highly probable, based on known opportunities or trends. These RFFAs must also fall *within the geographic scope and timeframe of the analysis* being prepared. Also see BLM's response to Comments in 2, 3, 19, and 21.

Typically only a small number of wind energy site testing and monitoring authorizations ever lead to actual wind energy development projects. Therefore, the reasonably foreseeable development of the project area does not focus on speculative future development scenarios.

BLM has received an application and POD for wind energy development. Resource commitments from this proposal will be fully evaluated under a separate NEPA analysis, OR-65553, as stated on page 1 of the EA. Also see BLM's response to Comments 2, 6, 19, and 21.

There is no requirement to have a separate cumulative impacts section. Regulations require agencies to describe and analyze the impacts but not to labor over which category to place them under. Both direct and indirect impacts accrue and interact to cause cumulative impacts.

Comment 21: The EA's cumulative effects analysis also fails to consider the reasonably foreseeable development of other wind projects in Harney County and the cumulative impact of those projects on the lands BLM manages and assists in managing.

BLM Response: As you stated, there is one proposed wind energy development (Columbia Energy Partners, Echanis Project) on North Steens Mountain with a Harney County conditional use permit 30-45 miles north of the Horizon Wind testing location. Although a conditional use permit from Harney County has been granted, there are aspects of the project still awaiting approval such as a ROW transmission line grant from the BLM. This ROW grant will require NEPA analysis and to date the NEPA process has not begun. It is highly likely wind testing as described under the Proposed Action will be completed prior to full development of the Columbia Energy Partners' Project. Therefore, the time requirement of cumulative effects would not be satisfied. In addition, Columbia Energy Partners' project is on a completely different mountain range with different water and viewsheds.

The Chapter III was updated to better clarify the Visual Resource Management Class allocations in the AMU RMP and the relationship between the proposed action and the Columbia Energy Partners, Echanis Project. Due to the distance, 30-45 air miles, plus topography and vegetation, the casual observer would not be able to see either of the wind energy farms from their respective locations, if and when both wind farms were operating at the same time in the future.

The only resource of concern *potentially* affected by both projects would be sage-grouse. Cumulative effects to sage-grouse as analyzed for this project proposal would be limited to the proposed project area and would be mitigated by the terms and conditions of the proposal. With stipulations in place and compliance with BLM policy (BLM IM OR-2008-014), there would be no effects to sage-grouse habitat from the geotechnical studies since the area was burned by wildfire in 2006 and now only provides habitat at leks during breeding season, and no habitat fragmentation, no unnecessary or undue degradation of public lands, and no permanent impairment to sage-grouse habitat in the area would occur from implementation of the Proposed Action. Even with restoration projects to restore sagebrush, yearlong habitat for sage-grouse will not be available for at least 15 years due to the Pueblo Fire. In addition, studies have shown female sage-grouse may nest up to 12 miles from the lek which would be approximately 18 miles from the closest point of the Columbia Project. Therefore, no cumulative effects to sage-grouse under this project proposal would occur in combination with the Columbia Energy Partners' project on Steens Mountain. Also see BLM's response to Comment 2, 6, and 19.

A discussion regarding RFFA was added to the EA on page 24 and 25.

Comment 22: The EA's cumulative effects analysis also has not identified or considered the cumulative effects in areas that BLM has opened to geothermal leasing in eastern Oregon and the foreseeable development of geothermal energy facilities.

BLM Response: It is important to note the project area is adjacent to the approximately 862,000-acre mineral withdrawal area created by the Steens Mountain Cooperative Management and Protection Act of 2000 and two WSAs. Geothermal exploration or drilling within these areas is not allowed. The only known geothermal activity within Burns District is a geothermal lease sale near Glass Buttes west of Riley, Oregon (approximately 100 air miles from the project area). Effects of geothermal leasing were described in the Three Rivers RMP and the Programmatic Final EIS for Geothermal Leasing in the Western United States (October 2008).

RATIONALE

This decision is based on public comments, consultation with ODFW, local Harney County government involvement, conformance to applicable laws and regulations for wind energy, meeting the Purpose of and Need for the Action, FLPMA, addressing increased interest in wind energy development, and to implement the National Energy Policy recommendation to increase renewable energy production on public lands. Additionally, a FONSI found the Proposed Action and Alternatives analyzed did not constitute a major Federal action that will adversely impact the quality of the human environment. Therefore, an EIS was unnecessary and will not be prepared.

The Applicant requested the ROW amendment to ensure exclusive use of the project area and continued wind data collection while a NEPA document and related studies for a commercial wind energy development facility could be analyzed by the BLM under OR-65553. The temporary met poles allow the Applicant to record weather information, including wind speed, direction, gusts, and temperature, that can be used with regional reference station data to characterize the long-term wind resource at the site. The collected data and geotechnical studies will allow Horizon to make an informed decision concerning indepth wind power project development activities in the project area under OR-65553. Wind power projects can have public benefits, providing clean domestic energy and diversifying the country's energy resource portfolio.

I also selected the Proposed Decision based on the following Decision Factors (outside laws and regulations). Decision factors are additional questions or statements used by the decision maker to choose between alternatives that best meet project goals and resource objectives. These factors generally do not include satisfying legal mandates, which must occur under all alternatives. Rather decision factors assess, for example, the comparative cost, applicability, or adaptability of the alternatives considered.

a. Would the alternative balance the proposed project's purpose and need with the BLM's other responsibilities to manage lands it administers? The proposed action meets the need for realty-related land use authorizations necessary for renewable energy development.
b. Would the alternative have unreasonable management costs to the public in achieving the purpose and need? There will be no cost to the public under the proposed action.
c. Does the alternative have unreasonable costs to the Applicant (Horizon) in achieving the purpose and need? No, the Applicant will be able to obtain the wind data and geotechnical study information needed to make sound decisions concerning their application for a wind farm development under OR-65553.

I did not select the No Action Alternative or Alternative for reasons described in the table below:

Decision Factor	No Action	Alternative
1. Would the alternatives balance the proposed project's purpose and need with the BLM's other responsibilities to manage lands it administers?	Does not achieve RMP management objective to meet public, private, and Federal agency needs for realty-related land use authorizations and land withdrawals including those authorizations necessary for wind, solar, biomass, and other forms of renewable energy development.	The purpose and need under this alternative would not be met as well as the proposed action. The more wind data and the geotechnical studies information which the BLM, the Applicant, and the Public have available for analysis of a wind farm development the better the analysis will be in the EIS for the wind farm development under OR-65553.
2. Would the alternatives have unreasonable management costs to the public in achieving the purpose and need?	No cost to the public.	No cost to the public.
3. Do the alternatives have unreasonable costs to the Applicant (Horizon) in achieving the purpose and need?	Taking No Action could lead to the Applicant's inability to collect valuable wind data necessary to determine feasibility of wind farm development and location of wind turbines. The Applicant would also lose exclusive wind energy opportunities for the project.	Only allowing the existing met towers to be permitted would affect the Applicant's ability to collect additional valuable wind data and geotechnical studies necessary to determine turbine locations. These two factors would inhibit the Applicant's ability to provide information to the BLM for the POD on wind energy development and make sound decisions.

APPEAL PROCEDURES

The ROW decision may be appealed to the IBLA, Office of the Secretary, in accordance with the regulations contained in 43 CFR, Part 4. An opportunity for appeal to the Board will be provided upon the issuance of an ROW decision letter which shall include a copy of this decision record, an approved copy of the ROW grant, its terms and conditions and other attachments thereto.

/signature on file/ 1/15/2009
Joan M. Suther Date
Andrews Resource Area Field Manager

2800 (OR-026)
OR-63580

CERTIFIED MAIL 7005 1820 0007 8745 2822
RETURN RECEIPT REQUESTED

DECISION

Gabriel Alonso Imaz	:	Right-of-Way Grant OR-63580
Chief Operating Officer	:	
Horizon Wind Energy Northwest X LLC	:	
53 SW Yamhill	:	
Portland, Oregon 97204	:	

Right-of-Way Grant OR-63580 Issued
Rental Determined
Monitoring Fee Determined

Dear Mr. Alonso:

Enclosed is a copy of your Right-of-Way (ROW) grant, serial number OR-63580, which allows the use of public land for the Pueblo Mountain Wind Energy Site Testing and Monitoring Project Area. It was approved by the Bureau of Land Management (BLM) on January 15, 2009.

The advance rental for the ROW is determined to be $17,982.23 for the period from January 1, 2009 to December 31, 2009. The BLM has received your advance rental for this period. All subsequent rental billings will be due at the beginning of the calendar year starting January 1, 2010. Future billings will be based on the rent schedule in effect at that time.

The monitoring fee for this ROW is determined to be a Category 2, which is $379.00. The BLM has received your monitoring fee.

Details of this right-of-way decision are contained in the decision record for Horizon Wind Energy Northwest X LLC, Pueblo Mountain Wind Energy Site Testing and Monitoring Project Area, Environmental Assessment (EA) OR-08-26-098. A copy of this decision record is enclosed for your reference.

This decision may be appealed to the Interior Board of Land Appeals, Office of the Secretary, in accordance with the regulations contained in 43 CFR, Part 4 and the enclosed Form 1842-1. If an appeal is taken, your notice of appeal must be filed in this office (at the above address) within 30 days from receipt of this decision. The appellant has the burden of showing that the decision appealed from is in error.

If you wish to file a petition (request) pursuant to regulation 43 CFR 2801.10 or 43 CFR 2881.10 for a stay (suspension) of the effectiveness of this decision during the time that your appeal is being reviewed by the Board, the petition for a stay must accompany your notice of appeal. A petition for a stay is required to show sufficient justification based on the standards listed below. Copies of the notice of appeal and petition for a stay must also be submitted to each party named in this decision and to the Interior Board of Land Appeals and to the appropriate Office of the Solicitor (43 CFR 4.413) at the same time the original documents are filed with this office. If you request a stay, you have the burden of proof to demonstrate that a stay should be granted.

Standards for Obtaining a Stay

Except as otherwise provided by law or other pertinent regulation, a petition for a stay of a decision pending appeal shall show sufficient justification based on the following standards:

(1) The relative harm to the parties if the stay is granted or denied,
(2) The likelihood of the appellant's success on the merits,
(3) The likelihood of immediate and irreparable harm if the stay is not granted, and
(4) Whether or not the public interest favors granting the stay.

If you have any questions, please contact Holly Orr, Realty Specialist, at (541) 573-4501.

Sincerely,

/signature on file/

Joan M. Suther
Andrews Resource Area Field Manager

4 Enclosures
1 - ROW Grant OR-63580
2 - BLM Form 1842-1
3 - Decision Record for Horizon Wind Energy Northwest X LLC, Pueblo Mountain Wind Energy Site Testing and Monitoring Project Area, EA-OR-08-26-098
4 - BLM WO IM-2009-043, Right-of-Way Management, Wind Energy

cc: Peter M. Lacy, Staff Attorney, Oregon Natural Desert Association
Brent Fenty, Executive Director, Oregon Natural Desert Association

Form 2800-14
(August 1985)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RIGHT-OF-WAY GRANT/TEMPORARY USE PERMIT

Issuing Office
Burns District Office

Serial Number
OR-63580

1. A (right-of-way) (permit) is hereby granted pursuant to:

   a. ☑ Title V of the Federal Land Policy and Management Act of October 21, 1976 (90 Stat. 2776; 43 U.S.C. 1761);

   b. ☐ Section 28 of the Mineral Leasing Act of 1920, as amended (30 U.S.C. 185);

   c. ☐ Other *(describe)* _____

2. Nature of Interest:

   a. By this instrument, the holder **Horizon Wind Energy Northwest X LLC** receives a right to construct, operate, maintain, and terminate a **wind energy site testing and monitoring project area (Pueblo Mountain)** on public lands (or Federal land for MLA Rights-of-Way) described as follows:

   See attached map, Exhibit A.
   See attached legal description, Exhibit C.

   b. The right-of-way or permit area granted herein is **N/A** feet wide, **N/A** feet long and contains **N/A** acres, more or less. If a site type facility, the facility contains **17,982.23** acres.

   c. This instrument shall terminate on **December 31, 2012**, **3** years from its effective date unless, prior thereto, it is relinquished, abandoned, terminated, or modified pursuant to the terms and conditions of this instrument or of any applicable Federal law or regulation.

   d. This instrument ☑ may ☐ may not be renewed. If renewed, the right-of-way or permit shall be subject to the regulations existing at the time of renewal and any other terms and conditions that the authorized officer deems necessary to protect the public interest.

   e. Notwithstanding the expiration of this instrument or any renewal thereof, early relinquishment, abandonment, or termination, the provisions of this instrument, to the extent applicable, shall continue in effect and shall be binding on the holder, its successors, or assigns, until they have fully satisfied the obligations and/or liabilities accruing herein before or on account of the expiration, or prior termination, of the grant.

(Continued on page 2)

3. Rental:

For and in consideration of the rights granted, the holder agrees to pay the Bureau of Land Management fair market value rental as determined by the authorized officer unless specifically exempted from such payment by regulation. Provided, however, that the rental may be adjusted by the authorized officer, whenever necessary, to reflect changes in the fair market rental value as determined by the application of sound business management principles, and so far as practicable and feasible, in accordance with comparable commercial practices.

Rental shall be assessed for this right-of-way in accordance with prevailing law and regulation, currently IM-2006-216. Rent shall be assessed in accordance with prevailing policy which is $1.00 per acre per year or in accordance with the current prevailing law, regulation, and policy at that time.

4. Terms and Conditions:

a. This grant or permit is issued subject to the holder's compliance with all applicable regulations contained in Title 43 Code of Federal Regulations parts 2800 and 2880.

b. Upon grant termination by the authorized officer, all improvements shall be removed from the public lands within **90** days, or otherwise disposed of as provided in paragraph (4)(d) or as directed by the authorized officer.

c. Each grant issued pursuant to the authority of paragraph (1)(a) for a term of 20 years or more shall, at a minimum, be reviewed by the authorized officer at the end of the 20th year and at regular intervals thereafter not to exceed 10 years. Provided, however, that a right-of-way or permit granted herein may be reviewed at any time deemed necessary by the authorized officer.

d. The stipulations, plans, maps, or designs set forth in Exhibit(s) **A, B, and C**, dated **January 1, 2009**, attached hereto, are incorporated into and made a part of this grant instrument as fully and effectively as if they were set forth herein in their entirety.

e. Failure of the holder to comply with applicable law or any provision of this right-of-way grant or permit shall constitute grounds for suspension or termination thereof.

f. The holder shall perform all operations in a good and workmanlike manner so as to ensure protection of the environment and the health and safety of the public.

See attached Exhibit B, #4. Terms and Conditions Continued.

IN WITNESS WHEREOF, The undersigned agrees to the terms and conditions of this right-of-way grant or permit.

(Signature of Holder)	(Signature of Authorized Officer) Acting
Gabriel Alonso Imaz	**Joan M. Suther, Andrews Resource Area Field Manager**
(Title)	(Title)
Chief Operating Officer	**January 15, 2009**
(Date)	(Effective Date of Grant)

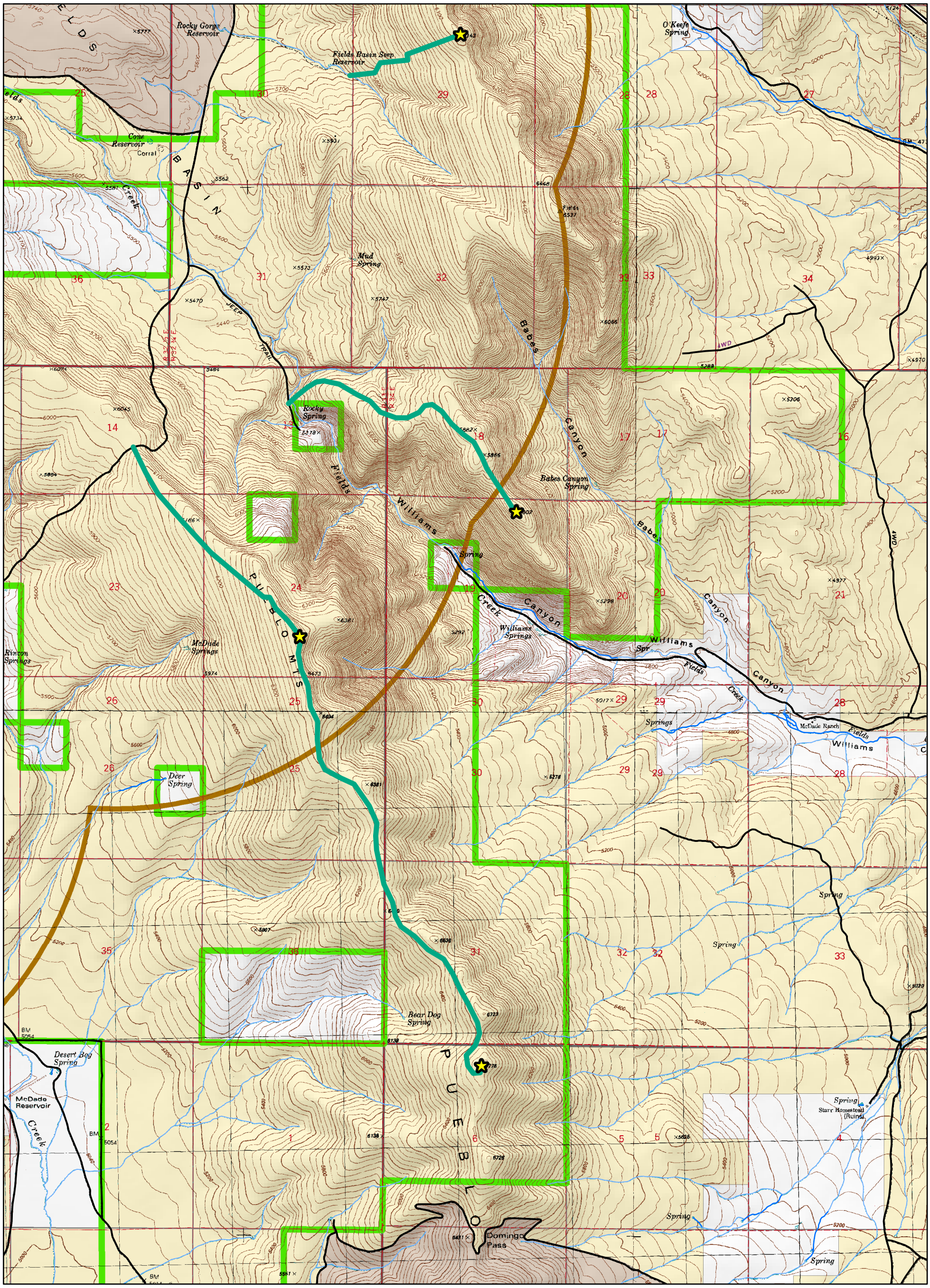

Exhibit A, OR-63580 Horizon Wind Energy NW X LLC
Pueblo Mtn Wind Energy Site Testing and Monitoring Project Area

- Authorized Met Tower
- Authorized Met Access
- Authorized ROW Area
- Leks Buffered 2 Miles
- Primitive Road
- Paved Road
- BLM Land
- Wilderness Study Area
- Private Land

0 0.5 1 Miles

N

Note: No warranty is made by the Bureau of Land Management as to the accuracy, reliability or completeness of these data for individual or aggregate use with other data. Original data was compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification. Ownership boundaries are accurate to within plus or minus 200 feet. Make local inquiry of road conditions in remote areas. Some roads are impassable following severe weather. Roads shown may not be all existing roads. Always seek private landowner permission before using or crossing their lands.

US DEPARTMENT OF THE INTERIOR
Bureau of Land Management
Burns District, Oregon
Andrews Resource Area

\projects\horizon_wind\EA_DOCUMENTS
ExhibitAFinal.mxd
January 1, 2009 For Holly Orr By Kelly Hazen

HORIZON WIND PUEBLO 1

HORIZON WIND PUEBLO 4

HORIZON WIND PUEBLO 2

HORIZON WIND PUEBLO 3

T37S R32.5E

T37S R32.75E

T38S R33E

T38S R34E

T39S R33E

T39S R34E

FIELDS BASIN RINCON ROAD

RINCON FLAT ROAD

PUEBLO MTS

RINCON SPRING ROAD

DOMINGO PASS ROAD

BLACKBIRD SPRING ROAD

Rocky Gorge Reservoir

Fields Basin Seep Reservoir

Cone Reservoir

Corral

Mud Spring

Rocky Spring

Babes Canyon

Williams Spring

McDade Springs

Rincon Springs

Deer Spring

Bear Dog Spring

Desert Dog Spring

McDade Reservoir

Starr Homestead (Ruins)

Domingo Pass

Fields Creek

Williams Canyon

Rincon Creek

French Creek

Exhibit A, OR-63580 Horizon Wind Energy NW X LLC
Pueblo Mtn Wind Energy Site Testing and Monitoring Project Area

- Proposed Met Tower
- Authorized Met Tower
- Proposed Met Access
- Existing Met Access
- Proposed ROW Area
- Existing ROW Area
- Leks Buffered 2 Miles
- Primitive Road
- Paved Road
- BLM Land
- Wilderness Study Area
- Private Land

0 0.5 1 Miles

N

Note: No warranty is made by the Bureau of Land Management as to the accuracy, reliability or completeness of these data for individual or aggregate use with other data. Original data was compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification. Ownership boundaries are accurate to within plus or minus 200 feet. Make local inquiry of road conditions in remote areas. Some roads are impassable following severe weather. Roads shown may not be all existing roads. Always seek private landowner permission before using or crossing their lands.

US DEPARTMENT OF THE INTERIOR
Bureau of Land Management
Burns District, Oregon
Andrews Resource Area

\projects\horizon_wind\EA_DOCUMENTS.mxd
September 18. 2008 For Holly Orr By Kelly Hazen

Exhibit B
#4. Terms and Conditions Continued
OR-63580, Pueblo Mountain
Wind Energy Site Testing and Monitoring Project Area Right-of-Way
Horizon Wind Energy Northwest X LLC
January 1, 2009

g. The holder shall administer the Right-of-Way (ROW) in conformance with the Bureau of Land Management (BLM) Best Management Practices, established by the Record of Decision for the Implementation of a Wind Energy Development Program, and Associated Land Use Plan Amendments, dated December 2005.

h. The holder shall construct, operate, and maintain two met poles and associated facilities in addition to continuing to operate the two existing met poles within this ROW in conformance with the Plan of Development dated July 1, 2008, and made part of the ROW grant, unless otherwise modified by the terms and conditions contained herein. Any relocation, additional construction, or use that is not in accordance with the application or this grant shall not be initiated without the prior written approval of the authorized officer.

i. Renewal of this ROW and future use and development of the project area for commercial wind energy shall be in accordance with the BLM's Wind Energy Development Policy, Instruction Memorandum No. 2006-216, or in accordance with the current prevailing law, regulation, and policy at that time.

j. The holder shall contact the authorized officer at least 3 days prior to beginning installation of each pole and associated facilities and 3 days prior to removal of these facilities.

k. All vehicular access would be confined to existing roads and trails and to a single authorized cross-country route which has been global position system surveyed on the ground and shown on the Site Map in Appendix A, Exhibit A.

l. Clearing of vegetation and grading land surfaces by equipment for staging, construction or access is not permitted, except for necessary grading to level the pole base. Individual rocks and boulders may be removed by hand to facilitate access to and use of these areas.

m. During periods of extreme fire danger, construction, operation, data retrieval or maintenance shall be limited or suspended in specific areas, or additional fire prevention and control measures may be required by the authorized officer.

n. No construction, operation, data retrieval or maintenance shall be performed when soil conditions are too wet to adequately support vehicles, except by All-Terrain Vehicles (ATVs). Access by vehicles other than ATVs is allowed during frozen or dry conditions on the access roads.

o. Snowplowing shall not be conducted without prior written approval of the authorized officer.

p. All motorized vehicles used in connection with this ROW shall be thoroughly washed down and cleaned of all mud, dirt, and vegetative debris at a location acceptable to the authorized officer to aid against spread of noxious weeds. Cleaning of motorized vehicles shall be accomplished immediately prior to initial mobilization and any time motorized vehicles are removed and returned to the road area.

q. The holder shall be responsible for weed prevention and control within the limits of the ROW when new surface-disturbing activities on the ROW are proposed. Prior to undertaking any weed prevention or control measures, the holder shall consult with the BLM authorized officer regarding acceptable weed control methods, monitoring, reporting, and education of personnel on weed identification. Application of chemicals for control of noxious weeds or any other purpose shall be in accordance with applicable Federal and State law and shall be approved by BLM prior to application.

r. Upon termination of testing and monitoring operations, all equipment, fencing, and other material associated with this ROW shall be removed from the site. Guy line anchors shall be removed to below ground level. As directed by the authorized officer, the cross-country travel route shall be barricaded and screened with vegetation or other suitable material to provide for natural rehabilitation of the route and site.

s. Bird flight diverters will be placed on the guy wires from top to bottom to improve visibility for wildlife and birds (existing met poles #1 and #2 have yellow flagging; this would only change to bird flight diverters if taken down for maintenance).

t. Aviation orange and white striping banding from top to bottom in accordance with Federal Aviation Administration Advisory Circular No. AC70/7460-1K, Obstruction and Marking, to provide improved visibility for local aircraft (existing met poles #1 and #2 have red and white striping on the top portion; this would only change to orange and white striping if taken down for maintenance).

u. Cattle fencing would be placed around anchor points of guy wire to limit the potential for entanglement by wildlife and livestock.

v. Access to met poles between March 1 and May 31 each year will be after 10 a.m. to avoid disturbance to sage-grouse at leks within 2-mile sage-grouse buffer.

w. There will be a 10-foot no construction zone at Pueblo #3 rock stack site to avoid a possible cultural site.

x. Geotechnical studies would not be conducted from March 1 through July 15 to avoid disturbance to nesting migratory birds, strutting or nesting sage-grouse within the entire project area.

Exhibit C
#2a. Legal Description Continued
OR-63580, Pueblo Mountain
Wind Energy Site Testing and Monitoring Project Area Right-of-Way
Horizon Wind Energy Northwest X LLC
January 1, 2009

Willamette Meridian (W.M.)	Acres
W.M., T. 37 S., R. 32½ E.,	
sec. 23, SE¼SW¼;	40.00
sec. 25, SW¼, S½SE¼;	240.00
sec. 26, W½NE¼, E½NW¼, SW¼NW¼, S½;	520.00
sec. 34, SE¼NE¼, E½SE¼;	120.00
sec. 35, all;	640.00
sec. 36, S½.	320.00
W.M., T. 37 S., R. 32¾ E.,	
sec. 17, SW¼SW¼;	40.00
sec. 18, lots 2 to 4, inclusive, SE¼NW¼, E½SW¼, S½SE¼;	238.54
sec. 19, E½, NE¼NW¼;	360.00
sec. 20, W½NE¼, SE¼NE¼, W½, SE¼;	600.00
sec. 28, W½;	320.00
sec. 29, all;	640.00
sec. 30, lot 4, E½, E½SW¼;	439.73
sec. 31, lots 1 to 4, inclusive, E½, E½W½;	639.52
sec. 32, all;	640.00
sec. 33, W½.	320.00
W.M., T. 38 S., R. 33 E.,	
sec. 13, lots 1 to 4, inclusive, SW¼, NE¼SE¼, S½SE¼;	406.88
sec. 14, lots 1 to 4, inclusive, S½;	449.20
sec. 15, lots 1 to 4, inclusive, S½;	451.44
sec. 16, lots 1 and 2, inclusive, E½SW¼, SE¼;	306.01
sec. 20, E½NE¼, SE¼;	240.00
sec. 21, all;	640.00
sec. 22, N½, SW¼, W½SE¼;	560.00
sec. 23, all;	640.00
sec. 24, NE¼, W½NW¼, SE¼NW¼, S½;	600.00
sec. 25, all;	640.00
sec. 26, NE¼, N½NW¼, SE¼NW¼, SW¼, W½SE¼, SE¼SE¼;	560.00
sec. 27, W½NE¼, SE¼NE¼, SE¼;	280.00
sec. 34, E½;	320.00
sec. 35, all;	640.00
sec. 36, N½.	320.00

Willamette Meridian (W.M.)	Acres
W.M., T. 38 S., R. 34 E.,	
sec. 16, lots 3 and 4, inclusive, SW¼;	233.80
sec. 17, lots 1 to 4, inclusive, S½;	467.77
sec. 18, lots 1 to 6, inclusive, E½SW¼, SE¼;	465.27
sec. 19, lots 1 to 4, inclusive, NE¼, NE¼NW¼, E½SW¼;	437.84
sec. 20, NW¼, N½SW¼;	240.00
sec. 30, lots 1 to 4, inclusive, E½W½;	317.84
sec. 31, lots 1 to 4, inclusive, E½, E½W½.	638.80
W.M., T. 39 S., R. 33 E.,	
sec. 1, lots 1 to 7, inclusive, SW¼NE¼, S½NW¼, SW¼, W½SE¼;	680.34
sec. 2, lots 1 and 2, inclusive, S½NE¼, SE¼;	325.71
sec. 11, E½;	320.00
sec. 12, NW¼, NW¼SW¼.	200.00
W.M., T. 39 S., R. 34 E.,	
sec. 6, lots 1 to 6, inclusive, S½NE¼, SE¼NW¼, NE¼SW¼, N½SE¼.	483.54

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
WASHINGTON, D.C. 20240
http://www.blm.gov/

December 19, 2008

In Reply Refer To:
2800 (350) P

EMS TRANSMISSION 12/22/2008
Instruction Memorandum No. 2009-043
Expires: 09/30/2010

To: All Field Officials

From: Director

Subject: Wind Energy Development Policy

Program Area: Right-of-Way Management, Wind Energy.

Purpose: This Instruction Memorandum (IM) provides updated guidance on processing right-of-way applications for wind energy projects on public lands administered by the Bureau of Land Management (BLM).

Policy / Action: This IM updates and replaces the Wind Energy Development Policy (IM 2006-216), issued August 24, 2006, and the Interim Wind Energy Development Policy (IM 2003-020), issued October 16, 2002. In addition, this IM further clarifies the BLM Wind Energy Development policies and best management practices (BMPs) provided in the Wind Energy Development Programmatic Environmental Impact Statement (EIS) of June 2005. Issuance of this IM ensures BLM-wide consistency in the processing of right-of-way applications and the management of authorizations for wind energy site testing and development on the public lands. The initiation of any new planning effort to create, revise, or amend a BLM land use plan will comply with policy provided in this IM. Land use planning efforts already underway will be assessed on a case-by-case basis to determine any necessary modifications or amendments.

Inventory and Planning: The BLM Land Use Planning Handbook (H-1601-1) requires that land use planning efforts address existing and potential development areas for renewable energy projects, including wind energy (see H-1601-1, Appendix C, II. Resource Uses, Section E. Lands and Realty). The BLM encourages the development of wind energy within acceptable areas, consistent with the Energy Policy Act of 2005 and the BLM Energy and Mineral Policy (August 26, 2008).

In October 2003, the BLM initiated the preparation of a Wind Energy Development Programmatic EIS to address the impacts of the future development of wind energy resources on public lands. The Department of Energy's (DOE) National Renewable Energy Laboratory (NREL) assisted the BLM in the preparation of the Programmatic EIS and provided an inventory assessment of wind energy resources on public lands in the Western United States. Appendix B of the Programmatic EIS includes wind resource potential maps for each BLM field office. The Programmatic EIS Record of Decision (ROD) addressed the amendment of individual BLM land use plans and established both policies and BMPs regarding the development of wind energy resources on BLM-administered public lands. The revised BLM wind energy policies and BMPs are included as Attachment 1 to this IM. Wind energy site testing and monitoring activities are typically in conformance with existing land use plans and, therefore, a land use plan amendment to address these activities is not likely to be necessary.

In cases where wind energy development proposals are not in conformance with an existing land use plan, it may be appropriate to amend the land use plan concurrently using the same analysis for the wind energy development proposal. Field offices with land use plans that were not amended by the Programmatic EIS Record of Decision may amend their plans at anytime by following the requirements under 43 CFR 1610.5-5. When considering a proposed plan amendment, field offices will tier to, or incorporate analysis from, the Programmatic EIS as appropriate under Chapter V of the BLM National Environmental Policy Act (NEPA) Handbook (H-1790-1).

All land use planning efforts initiated after the issuance of this IM will address wind resource potential, public concerns, and opportunities for wind energy development within the land use planning area consistent with the BLM Land Use Planning Handbook (appendix C). Field offices will incorporate wind energy resource development potential in these planning efforts to facilitate the processing of future wind energy applications. The land use plan revision process will address the environmental and public concern issues associated with commercial wind energy development. This will provide an opportunity to potentially reduce the amount of additional environmental review and documentation required to process a specific application in the future.

Information on wind energy resources is available at http://www.energyatlas.org/. In addition, wind resources information is also available from the Department of Energy site at www.eere.energy.gov/windandhydro/windpoweringamerica/wind_maps.asp. Field offices are encouraged to use this information as the inventory base for land use planning.

Visual Resource Management (VRM)

The BLM Land Use Planning Handbook requires that VRM management classes be identified in land use plans based on inventories of visual resources as well as management considerations for other potential land uses (e.g., wind energy development). The VRM management classes may differ from VRM inventory classes based on the management priorities for land uses in an area. The VRM management classes are intended to establish landscape management objectives for a variety of surface disturbing activities. The VRM management classes are not intended to be used to exclude or preclude land uses, including opportunities for development of wind energy in areas with high wind energy resource potential.

Therefore, it is critical that when the BLM makes land use decisions it considers the attainability and manageability of VRM objectives relative to the wind energy resources and development potential and is consistent with our national energy priorities.

The VRM management class designations must be carefully considered in areas with high wind energy resource potential (wind power class 5 and above). This is especially important when considering the differences in resource management constraints relative to VRM Class II and Class III management classes in a planning area. The goal of the VRM program is to apply the basic principles of design of wind energy projects at the site-specific project level to mitigate or minimize visual resource impacts and meet VRM objectives established in the land use plan. In many cases, VRM management objectives designated at the land use planning level can be met through strategic placement of facilities and thoughtful design treatments that visually integrate the facilities into the landscape setting, thereby avoiding unnecessary land use plan restrictions. Performing Geographic Information Systems-based (GIS) viewshed analyses in areas of high wind energy resource potential and high visual resource values during land use planning can assist in determining suitability and compatibility between these resources, promote more integrated resource management, and avoid unwarranted exclusion and avoidance designations. Application of state-of-the-art digital terrain modeling and visual simulations as well as an integrated environmental design approach to project planning will go far to successfully integrate wind energy projects into the visual landscape. Conducting such analyses will provide the BLM with more objective criteria and defensible analysis to base VRM management class designations in the future. The BLM and wind energy operators will work collaboratively to seek creative ways to provide for renewable energy development while protecting visual resource values on the public lands.

Wildlife and Migratory Birds

In July 2003, the Fish and Wildlife Service (FWS) issued "Voluntary Interim Guidelines to Avoid and Minimize Wildlife Impacts from Wind Turbines." The guidelines are currently being reviewed by a Wind Turbine Guidelines Advisory Committee established under the Federal Advisory Committee Act (FACA) to provide further advice and recommendations to the Secretary of the Interior (Secretary) on effective measures to avoid or minimize impacts to wildlife and their habitats from wind energy facilities. The voluntary interim guidelines are not mandatory requirements in BLM land use plan decisions. Until the Secretary determines the applicability of final guidelines for the Department of the Interior (DOI) agencies, the FWS interim guidelines should only be used as a general guide to assist the BLM in siting decisions and the design of pre-development surveys, mitigation measures, and post-construction monitoring for site-specific projects.

The BLM Washington Office IM 2008-050 (December 18, 2007) provides interim guidance for Federal responsibilities under the Migratory Bird Treaty Act. This guidance addresses analysis of BLM land use planning decisions to avoid or minimize measurable negative impacts to migratory bird populations. The BLM guidance on migratory birds and the FWS guidelines may be used for site-specific wind energy projects to assist in developing mitigation measures for avoiding or minimizing impacts to wildlife and avoiding or minimizing measurable negative impacts to migratory birds. The BLM 6840 Manual also provides guidance on Special Status Species Management.

Areas of Critical Environmental Concern (ACEC)

The BLM will not issue right-of-way authorizations for wind energy development for areas in which wind energy development is incompatible with specific resource values. Specific lands excluded from wind energy site testing and monitoring and wind energy development include designated areas that are part of the National Landscape Conservation System (NLCS) (e.g., Wilderness Areas, Wilderness Study Areas, National Monuments, National Conservation Areas, Wild and Scenic Rivers, and National Historic and Scenic Trails). Wind energy development is permitted in one National Conservation Area, the California Desert Conservation Area (CDCA), in accordance with the provisions of the *California Desert Conservation Area Plan 1980.*

The Wind Energy Programmatic EIS established the previous policy that all ACECs were to be excluded from wind development. This IM changes this policy to ensure consideration of the purpose and specific environmental sensitivities for which the area was designated. All new, revised, or amended land use planning efforts will address and analyze ACEC land use restrictions individually, including restrictions to wind energy development. For future land use planning efforts, ACECs will not universally be excluded from wind energy site testing and monitoring or wind energy development but will be managed consistent with the management prescriptions for the individual ACEC. Existing land use plans and planning efforts may be amended as necessary, with appropriate level of NEPA analysis and decision, to address this change in wind energy and ACEC policy, consistent with the procedures of 43 CFR 1610.5.5. A site-specific land use plan amendment to address this change in policy may be addressed concurrently with the processing of a wind energy application. This revised policy will continue to provide protection of sensitive resource values in ACECs consistent with the management prescriptions for the individual ACEC.

Avoidance and Exclusion Areas

Land use plans may identify right-of-way avoidance areas or exclusion areas under the BLM land use planning guidelines (see Appendix C of the BLM Land Use Planning Handbook
H-1601-1). Avoidance areas, as defined by the land use planning guidelines, do not preclude the issuance of rights-of-way for wind energy site testing and monitoring activities or wind energy development or preclude the issuance of permits, leases, or easements under Section 302 of the Federal Land Policy and Management Act (FLPMA). These uses in avoidance areas may be available with special stipulations or mitigation measures. For such authorizations, the area's environmental sensitivity and other feasible alternatives will be strongly considered.

Applications: All wind energy and wind energy-related facilities will be applied for under Title V of the FLPMA and Title 43, Part 2800 of the Code of Federal Regulations. The regulations cited in this IM refer to the right-of-way regulations which were published in the *Federal Register* on April 22, 2005, and became effective on June 21, 2005.
Wind energy site testing and monitoring facilities (meteorological towers) will not be authorized by a land use permit under the 43 CFR 2920 regulations but will be authorized as FLPMA rights-of-way. Geotechnical testing activities for foundation designs or other purposes will be authorized, however, by a land use permit under the 43 CFR 2920 regulations.

Applications for a wind energy right-of-way grant may be submitted for one of the following three types of wind energy projects:

1. A site-specific grant for individual meteorological towers and instrumentation facilities with a term that is limited to 3 years;
2. A project area grant for a larger site testing and monitoring area, with a term of 3 years that may be renewed consistent with 43 CFR 2807.22 and the provisions of this IM beyond the initial term of the grant; or
3. A development grant with a term that is not limited by the regulations, but will generally be for a term of 30 years.

Preapplication

Applications for any of the above projects will be submitted using Form SF-299, Application for Transportation and Utility Systems and Facilities on Federal Land, consistent with the requirements of 43 CFR 2804.12. The BLM authorized officer will encourage wind energy applicants to schedule preapplication meetings (43 CFR 2804.10) with the BLM to:

- Assist in the preparation and processing of applications,
- Identify potential issues and conflict areas,
- Identify visual resource issues and define the viewshed area of the proposed project for visual resources modeling,
- Identify any environmental or cultural resource studies that may be needed,
- Assess public interest and concerns,
- Identify other authorized uses,
- Identify other general recreation and public uses in the area,
- Discuss potential alternative site locations, and
- Discuss potential financial obligations (cost recovery fees, rental, and bonding) that the applicant must be willing to assume.

Coordination

Early informal public contacts with local community leaders and other interested parties are important in increasing public awareness and avoiding potential conflicts, especially in areas where other uses exist on the public lands. The applicant is encouraged to meet jointly with the BLM and the state wildlife agency early in the process to facilitate coordination on potential wildlife issues. Upon determining that the application is complete, the BLM field office will initiate consultation with the Department of Defense (DOD) on potential military airspace conflicts for both site testing and monitoring applications and for wind development projects, consistent with interagency protocol procedures. The military protocol procedures and a listing of DOD points-of-contact (Regional Environmental Coordinators) for consultation purposes are provided at www.blm.gov/wo/st/en/prog/energy/wind_energy.html. The BLM will initiate the consultation with the DOD within 30 days after receipt of a complete wind energy right-of-way application. In addition, the applicant is encouraged to submit the required filings with the Federal Aviation Administration (FAA) as early in the application process as possible to identify any air safety and lighting measures that will be required for the project. In addition, after meteorological towers are authorized and constructed, the BLM will ensure the location of these towers are noted on aerial navigation hazard maps for low-level flight operations that may be undertaken by the BLM and other Federal or state agencies for fire operations, wild horse and burro census and gathers, wildlife inventories, facility maintenance, or other activities.

Fees

All wind energy right-of-way applications and authorizations are subject to appropriate cost recovery fees for processing and monitoring as well as rental fees

as required by 43 CFR 2804.14, 43 CFR 2805.16, and 43 CFR 2806.10. The policy guidance on rental fees contained in this IM is based on comparable payment practices for existing wind energy right-of-way authorizations on Federal and non-Federal lands. Wind energy right-of-way authorizations are considered non-linear right-of-way grants and, therefore, are not subject to the requirements of 43 CFR 2806.23 regarding multiyear rental payments. However, by policy, the holder of a wind energy site testing and monitoring right-of-way grant may pay the required rental fee for the entire term of the grant in advance.

Processing Timeframes

Right-of-way applications for wind energy site testing and monitoring or wind energy development projects will be identified as a priority field office workload and will be processed in as timely a manner as possible. The processing time frames for right-of-way applications as required by 43 CFR 2804.25 will be followed for all wind energy applications. Site testing and monitoring right-of-way applications should be processed within a 60-day time frame, consistent with the requirements of 43 CFR 2804.25. The regulations require that the authorized officer notify the right-of-way applicant in writing if processing will take longer than 60 days, the reasons for the delay, and an estimate of the time frame for processing the application. The BLM Washington Office, Land, Realty and Cadastral Survey Division (WO-350) may be able to assign a right-of-way project manager, if requested by the state director, to coordinate the processing of any major wind energy development right-of-way application.

Authorizations:

1. Site-specific Grant for Testing and Monitoring:

A site-specific FLPMA right-of-way grant (Form 2800-14) will be used to authorize individual meteorological towers and instrumentation facilities. The area authorized for these facilities will be the minimum necessary for construction and maintenance of the temporary facility and any access required to the site. The term of a site-specific right-of-way grant will be limited to
3 years from the date of issuance. A site-specific right-of-way grant will not be renewed beyond this term. A new right-of-way application will be required if the holder of the site-specific right-of-way grant wishes to continue monitoring at the site. Numerous site-specific right-of-way grants for wind energy site testing and monitoring may be issued to various right-of-way holders in the same area and do not establish any exclusive or preferential rights regarding future wind energy development. In addition, the BLM retains the right to authorize other compatible uses of the public lands in the area.

Rent: The rental fee for a site-specific right-of-way grant for wind energy site testing and monitoring will be a minimum of $100 per year for each meteorological tower or instrumentation facility location and includes no additional rental fee for the acreage of each site location. Some BLM field offices have existing site-location rental fees for temporary facilities on the public lands that can be used for wind energy site testing and monitoring facilities. In some cases these fees will exceed the minimum $100 per year fee. The rental fee for a site testing and monitoring right-of-way grant is paid annually, in advance, on a calendar-year basis consistent with the regulations (43 CFR 2806.12). However, by policy, the holder of a site-specific right-of-way grant may pay the required rental fee for the entire term of the grant in advance.

Grant Administration: Each site-specific site testing and monitoring authorization will contain appropriate BMPs and may contain appropriate site-specific stipulations, including but not limited to road construction and maintenance, vegetation removal, and number and location of wind monitoring sites. A bond will be required for site testing and monitoring authorizations to ensure compliance with the terms and conditions of the authorization. A minimum bond in the amount of $2,000 per meteorological tower will be required for all authorizations. The amount of the reclamation bond may include potential reclamation and administrative costs to the BLM.

The wind inventory data collected and held by the right-of-way grant holder is proprietary information, will be protected by the Privacy Act, and may be withheld under the Freedom of Information Act to the extent allowed by Federal law.

Site testing and monitoring authorizations may be assigned consistent with the provisions of the regulations (43 CFR 2807.21). However, all assignments must be approved by the BLM authorized officer and the qualifications of all assignees must comply with the Due Diligence section of this IM and the requirements of the regulations (43 CFR 2804.12(a)(5) and 43 CFR 2804.26(a)(5)).

2. Project Area Grant for Testing and Monitoring:

A FLPMA right-of-way grant (Form 2800-14) that includes provisions for renewal beyond the
3-year term (43 CFR 2807.22) will be used to authorize wind energy site testing and monitoring facilities for a project area and the access required to the project area and facilities. A project area as used in this IM describes an area of land where wind resource information is being collected to determine the wind energy resource potential of the area. The holder of the project area grant retains an interest in the site testing and monitoring project area, but will be required to submit a separate right-of-way application (43 CFR 2807.20) and Plan of Development (POD) to the BLM for review, analysis, and separate approval for any future wind energy development proposal. The interest retained by the holder of the project area grant is only an interest to preclude other wind energy right-of-way applications during the 3-year term of the grant. The lands within the grant area will not be available for other wind energy right-of-way applications. The holder of the project area grant establishes no right to development and is required to submit a separate right-of-way application for wind energy development to the BLM for analysis, review, and decision. The BLM retains the right to authorize other compatible uses of the public lands.

Acreage: The lands involved in the project area grant will be defined by aliquot legal land descriptions and configured to involve a reasonable amount of land to support a possible right-of-way application for a wind energy development project in the future. There are no statutory or regulatory limits on the acreage of a site testing and monitoring right-of-way application; however, the BLM may request additional information from the applicant to determine if the project area is a reasonable size for a potential wind energy development project in the area. The BLM may request general information on the potential wind resources of the area, the potential project size and megawatt capacity of the area, and the potential project development configuration and limitations to assist in determining whether the application is of a reasonable size. Applicants seeking large acreage sites should be advised that the BLM will require those applicants to provide rationale describing how they would potentially develop such large acreage. The BLM is not required to accept applications that are not in the public interest; however, BLM field offices will not inappropriately limit the size of project areas that may be needed to evaluate an area for potential wind energy development. Any amendments to site testing and monitoring right-of-way authorizations that would add additional acreage to the authorization would still be limited to the 3-year term of the initial grant.

Site Testing: To assess the wind resource development potential of a project area, an applicant is not required to place site testing and monitoring facilities (meteorological towers) on every parcel of public land involved in a project area in order to adequately assess the wind resources of a project area on public lands. In some cases, an applicant may propose to place meteorological towers on adjacent private, state, or other land without any meteorological towers on public land.

The BLM Washington Office has a funding agreement with the DOE's NREL. Any BLM field office may request the NREL to assist in evaluating the applicant's proposal for the siting and number of meteorological towers. In order for NREL to evaluate the proposal, the field office must submit the following information to NREL: a topographic map of the area showing the boundary of the proposed project area, land ownership, proposed location and height of the meteorological towers, and proposed access roads. The BLM Land, Realty and Cadastral Survey Division (WO-350) can provide the point-of-contact at NREL for these evaluations.

If the evaluation determines that the meteorological tower placement on adjacent non-Federal land is capable of characterizing the wind patterns on public lands, then a NEPA document will be prepared describing the Federal action as the issuance of a right-of-way grant with limited activities on the public land. If the evaluation concludes that the proposal cannot adequately assess the wind patterns on public lands or the project area proposed is not consistent with good wind testing techniques, then the applicant will be notified of this finding and given the opportunity to amend the proposal. If the proponent does not amend the application, the BLM authorized officer may reject the application.

In cases where a right-of-way grant is issued for a project area and no meteorological towers are installed on public lands, the Due Diligence section of this IM requires the proponent to install the meteorological towers on the non-Federal land within 12 months from the effective date of authorization. The holder will provide the BLM with good cause as to the nature of any delay. The purpose of the Due Diligence provisions of the IM are to preclude land speculators from obtaining a right-of-way grant for a project area with valuable wind energy resources that would preclude other applicants with serious interests in the potential

development of wind energy on the public lands.

Renewal: The right-of-way grant for a project area is issued for an initial term of 3 years from the date of issuance. This term can be renewed (43 CFR 2807.22) for a term not to exceed
3 years if a separate rightâ€‘ofâ€‘way application and POD is submitted for a wind energy development project prior to the end of the initial term of the site testing and monitoring grant. A request for renewal authorization must be submitted 120 days before the end of the term of the grant (43 CFR 2807.22). However, the development right-of-way application and POD are not required to be submitted until just prior to the end of the term of the site testing and monitoring authorization. The request for renewal should be carefully reviewed to determine if the acreage requested may be reduced to reflect the area proposed for the wind energy development project.

The holder of the site testing and monitoring right-of-way grant should be advised that appropriate environmental and geotechnical studies and inventory information should be collected in conjunction with the wind energy site testing and monitoring studies during the
3-year term of the initial grant. The grant holder is required to submit a study design strategy to the BLM for review and comment in advance to ensure the environmental studies are of sufficient detail and scope for the project area. The data gathered is an integral part of preparing the initial POD for a proposed wind energy development if an application is submitted in the future. Developers should begin the required environmental studies during the initial grant period and not wait until they submit an application for renewal of the site testing and monitoring authorization.

Plan of Development: The grant holder is required to submit, prior to the end of the initial term of the site testing and monitoring grant, a separate right-of-way development application and POD to retain the interest in the project area. The applicant is encouraged to schedule a preapplication meeting with the BLM prior to submittal. The pre-application meeting will provide an opportunity to discuss the environmental and sensitive issues that may be associated with the proposed wind energy development project, processing timeframes and environmental analysis and review procedures, cost recovery requirements, and potential mitigation measures that could be included in the POD.

Concurrent submittal of a POD with the right-of-way application for the wind energy development project is consistent with the provisions of 43 CFR 2804.25. The BLM will not accept a POD that is simply a conceptual plan of development and must be of sufficient detail to provide the basic information necessary to begin the environmental analysis and review process for the proposed wind energy development project. Attachment 2 provides an outline of the minimum requirements for the initial POD.

The initial wind energy POD must be submitted prior to the end of the 3-year term of a site testing and monitoring authorization. If the initial POD is incomplete, the wind energy right-of-way applicant will be contacted by letter and must provide a complete POD consistent with the POD requirements to the BLM within 90 days. If the applicant has not responded within
90 days, or if the applicant has responded and the information provided is not sufficient, the BLM will send a 30-day show-cause letter to the applicant prior to issuing any decision to reject the application for failure to respond pursuant to the regulations (43 CFR 2804.25(b) and 2804.26(a)(6)). During the NEPA review process, additional information may be requested of the applicant. The BLM will provide the applicant reasonable periods of time to respond to these requests for additional information.

Rent: The rental fee for a project area grant will be based on the total public land acreage of the project area included in the right-of-way grant. The rental fee for the total public land acreage of the grant will be $1,000 per year or $1 per acre per year, whichever is greater. This rental fee is based on comparable fees on non-Federal lands and is consistent with the limited use of the land. There is no additional fee for the installation of each meteorological tower or instrumentation facility located within the site testing and monitoring project area. This rental fee is based on the value of the use of the area for site testing and monitoring and the value of the option held by the holder that precludes other wind energy right-of-way applications during the 3-year term of the grant, comparable to similar option payments on private lands. The rental fee for a site testing and monitoring right-of-way grant is paid annually, in advance, on a calendar-year basis consistent with the regulations (43 CFR 2806.12). However, by policy, the holder of a site testing and monitoring right-of-way grant may pay the required rental fee for the entire term of the grant in advance.

Grant Administration: Each project area grant will contain appropriate BMPs and may contain appropriate site-specific stipulations, including but not limited to road construction and maintenance, vegetation removal, and number and location of wind monitoring sites. A bond will be required for site testing and monitoring authorizations to ensure compliance with the terms and conditions of the authorization. A minimum bond in the amount of $2,000 per meteorological tower will be required for all authorizations. The amount of the reclamation bond may include potential reclamation and administrative costs to the BLM.

The wind inventory data collected and held by the right-of-way grant holder is proprietary information, will be protected by the Privacy Act, and may be withheld under the Freedom of Information Act to the extent allowed by Federal law. However, general wind resource information must be provided to the BLM, at the time a separate right-of-way application for development is submitted, to support the environmental analysis and review of the proposed development. This information becomes public information to the extent allowed by Federal law and will be used for analysis and decision-making purposes related to the processing of the right-of-way application for a wind energy development project. Biological and cultural resource studies and data collected by the right-of-way grant holder and provided to the BLM will become public information to the extent allowed by Federal law.

Site testing and monitoring authorizations may be assigned consistent with the provisions of the regulations (43 CFR 2807.21). However, all assignments must be approved by the BLM authorized officer and the qualifications of all assignees must comply with the Due Diligence
section of this IM and the requirements of the regulations (43 CFR 2804.12(a)(5) and 43 CFR 2804.26(a)(5)). A partial assignment of a site testing and monitoring authorization will not be approved if such action would hinder the BLM management of the authorization or the associated public lands.

3. Development Grant:

A FLPMA right-of-way grant (Form 2800-14) will be used to authorize all facilities held by the holder of the grant on the public lands related to a commercial wind energy development project. This authorization will include the wind turbine facilities as well as the onsite access roads, electrical and distribution facilities, and other support facilities authorized by the wind energy development right-of-way grant. Other offsite facilities, such as electrical transmission and additional access roads, may require a separate linear right-of-way authorization. The lands involved in the development grant will be defined by aliquot legal land descriptions and be configured to minimize the amount of land involved, while still allowing an adequate distance between turbine positions and reasonable right-of-way boundaries. In the absence of any specific local zoning and management issues, no turbine will be positioned closer than 5 rotor-diameters from the center of the wind turbine to the right-of-way boundary in the dominant upwind or downwind direction to avoid potential wind turbulence interference issues with adjacent wind energy facilities unless it can be demonstrated that site conditions, such as topography, natural features, or other conditions such as offsets of turbine locations, warrant a lesser distance. Further, for safety reasons, no turbine on public land will be positioned closer than 1.5 times the total height of the wind turbine to the right-of-way boundary. In cases where the applicant holds a long-term lease right on adjacent Federal or non-Federal lands for wind energy development or the adjacent non-Federal landowner provides a setback waiver, these minimum setbacks may be eliminated, allowing turbines to be placed closer to the right-of-way boundary.

The right-of-way holder should be encouraged, through terms and conditions of the right-of-way authorization, to work with the BLM to increase the public awareness of the benefits of wind energy development by providing information and public points-of-access near the development where safe and appropriate. These measures may include onsite interpretive resources and photo locations. The BLM and right-of-way holder may provide a positive message on the responsible use of renewable resources and the multiple resource uses of the public lands.

Rent: The rental fee for a development grant has been updated from the fee originally established by the Interim Wind Energy Development Policy in October 2002. The new rental fee established by this IM is $4,155 per megawatt of the total anticipated installed capacity of the wind energy project on public land based on the approved POD, a capacity factor of 30 percent, a Federal rate of return of 5.27 percent, and an average purchase price of $0.03 per kilowatt hour. The Federal rate of return is based on the 10-year average of the 30-year Treasury bond yield (January 1998 to January 2008). The rental fee is a fixed annual BLM-wide rent based on the following formula:

Annual rent = (Anticipated total installed capacity in kilowatts on public land as identified in the approved POD) x (8760 hours per year) x (30 percent capacity factor) x (5.27 percent federal rate of return) x ($0.03 average price per kilowatt hour).

Example for one megawatt (1,000 kW) of anticipated total installed capacity on public land:

Annual rent = (1,000 kW) x (8760 hours) x (0.30 capacity) x (0.0527 rate of return) x ($0.03 per kWh) or $4,155 per megawatt of anticipated total installed capacity on public land.

The annual rental fee will be phased in as follows:

First year - 25 percent of the total rental fee or $1,039 per megawatt
Second year - 50 percent of the total rental fee or $2,078 per megawatt
Third year - 100 percent of the total rental fee or $4,155 per megawatt

The full annual rental fee will apply at any time prior to 3 years upon the start of commercial operations of the project. The rental fee is paid annually, in advance, on a calendar-year basis consistent with the regulations (43 CFR 2806.12). The BLM will not assess a separate turbine installation fee (an additional one-time payment for each turbine installation), a production rental fee, or other fees as part of the wind energy rental fee. Any separate linear right-of-way authorizations issued for offsite facilities to support the wind energy project, such as electrical transmission lines, will be subject to the linear right-of-way rental provisions of 43 CFR 2806.20.

All wind energy right-of-way holders are subject to rent in accordance with this IM, unless they are specifically exempt from rent by statute or regulation. Some holders or facilities may be exempt from rent pursuant to the Rural Electrification Act of 1936, as amended (43 CFR 2806.14(d)).

Grant Administration: The term of a development grant is not limited by the regulations; however, the terms of most existing grants for major wind energy development projects recognize the overall costs and useful life of wind energy facilities and are generally for a term of 30 years. The grant may be renewed for additional terms, consistent with the provisions of the regulations (43 CFR 2807.22). The BLM also retains the right to authorize other compatible uses of the public lands within the right-of-way grant during the term of the grant.

A bond will be required for all development grants to ensure compliance with the terms and conditions of the right-of-way authorization and the requirements of applicable regulatory requirements. The amount of the bond may include potential reclamation and administrative costs to BLM. A minimum bond in the amount of $10,000 per wind turbine, considering salvage values of turbines and towers, will be required for all wind energy development projects on public lands. However, the amount of the required bond will be determined during the right-of-way authorization process on the basis of site-specific and project-specific factors. Acceptable bond instruments include cash, cashier's or certified check, certificate or book entry deposits, negotiable U.S. Treasury bonds equal in value to the bond amount, or surety bonds from the approved list of sureties (U.S. Treasury Circular 570) payable to the Bureau of Land Management. A letter of credit is not an acceptable form of bond. All bonds will be periodically reviewed (at least every 5 years) by the BLM authorized officer to ensure adequacy of the bond.

The development grant may be assigned consistent with the provisions of the regulations (43 CFR 2807.21). However, all assignments must be approved by the BLM authorized officer and the qualifications of all assignees must comply with the Due Diligence section of this IM and the requirements of the regulations (43 CFR 2804.12(a)(5) and 43 CFR 2804.26(a)(5)). A partial assignment of the grant will not be approved if such action would hinder the BLM management of the authorization or the associated public lands.

All final decisions issued by the authorized officer in connection with the authorization of any of the above described wind energy projects are appealable under 43 CFR Part 4 (43 CFR 2801.10). It should also be noted that right-of-way grants are issued as full force and effect decisions (43 CFR 2801.10(b)) and will remain effective during any appeal period, unless stayed by the Interior Board of Land Appeals (IBLA).

Competitive Interest: The right-of-way regulations (43 CFR 2804.23(c)) provide authority for identifying public lands under competitive bidding procedures for wind energy right-of-way authorizations. However, the BLM will only initiate a competitive process if a land use planning decision has specifically identified an area for competitive wind energy leasing. The Programmatic EIS and associated ROD did not identify any competitive wind energy leasing areas for any BLM land use plans; therefore, any competitive leasing areas would need to be identified through a local land use planning process. Site testing and monitoring or wind energy development right-of-way applications will be processed, therefore, on a first-come basis. The BLM will encourage applicants who may have an interest in a common area to establish a partnership or cooperative agreement that establishes compatible use of the site among the applicants. If the applicants choose not to form a partnership or cooperative agreement, the BLM will proceed to process the first complete application with attached cost recovery fees required by 43 CFR 2804.14.

Due Diligence: There are some concerns regarding the potential for land speculators to obtain right-of-way grants and control valuable wind energy resource areas that would preclude other applicants with serious interests in the potential development of wind energy on the public lands. These concerns can be mitigated by applying the applicant qualification requirements of the regulations (43 CFR 2804.12(a)(5) and 43 CFR 2804.26(a)(5)) and requiring certain due diligence provisions in the right-of-way authorization for site testing and monitoring or wind energy development.

Technical and Financial Capability

The regulations provide authority to require the application to include information on the applicant's technical capability to construct, operate, and maintain the wind energy facilities and associated transmission facilities (43 CFR 2804.12(a)(5)). This technical capability can be demonstrated by international or domestic experience with wind energy projects or other types of electric energy-related projects on either Federal or non-Federal lands. The applicant should provide information on the availability of sufficient capitalization to carry out development, including the preliminary study phase of the project, as well as the site testing and monitoring activities. Actual development or ownership of similarly-sized wind energy facilities or other types of electric energy-related facilities within the last 5 years by the applicant would generally constitute evidence of financial capability. However, applicants in bankruptcy or other related financial difficulties may not be able to meet the due diligence provisions of the right-of-way authorization. Attachment 2 provides an outline of the information to include in the POD, which requires the submittal of information on the financial and technical capability of the applicant. The regulations provide the authority to deny the application if the applicant cannot demonstrate adequate technical ability to construct, operate, and maintain the wind energy facilities (43 CFR 2804.26(a)(5)).

Terms and Conditions

Due diligence is encouraged by the limited 3-year term of the site testing and monitoring right-of-way authorization. The project area grant can only be renewed if a separate right-of-way application and POD is submitted for a wind energy development project prior to the end of the initial term of the project area grant. In addition, the site testing and monitoring authorization and the wind energy development authorization will include a due diligence requirement for installation of facilities consistent with an approved POD.

The following due diligence requirements must be included in the terms and conditions of either the site testing and monitoring authorization or the wind energy development authorization:

- If monitoring facilities under a site testing and monitoring right-of-way authorization have not been installed within 12 months after the effective date of the authorization or consistent with the timeframe of the approved POD, the holder will provide the BLM good cause as to the nature of any delay, the anticipated date of installation of facilities, and evidence of progress toward site monitoring activities.
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- If construction of wind energy facilities under a wind energy development authorization has not commenced within 2 years after the effective date of the grant or consistent with the timeframe of the approved POD, the right-of-way holder will provide the BLM good cause as to the nature of any delay, the anticipated date of construction, and evidence of progress toward commencement of construction.

Failure of the holder to comply with the due diligence terms and conditions of either the site testing and monitoring authorization or the wind energy development authorization provides the authorized officer the authority to terminate the authorization (43 CFR 2807.17). The rental fee provisions outlined in this IM also mitigate, to some extent, the concerns regarding due diligence.

Environmental Review: The Programmatic EIS addressed a range of alternatives including the proposed action that would implement a wind energy development program with the establishment of a set of policies and BMPs for wind energy development on the public lands. In accordance with this IM, the BLM is clarifying some of the policies and BMPs established in the Programmatic EIS. In particular, ACECs will not be universally excluded from wind energy site testing and monitoring or wind energy development but will be managed consistent with the management prescriptions for the individual ACEC. Consistent with the analysis in the Programmatic EIS, this revised policy will continue to provide protection of sensitive resource values in ACEC areas and will not result in effects outside the range of effects analyzed in the Programmatic EIS.

The revised policies and BMPs are included in attachment 1 of this IM and are applicable to all wind energy activities on BLM-administered public lands. The BMPs establish environmentally sound and economically feasible mechanisms to protect and enhance natural and cultural resources. They identify the issues and concerns that need to be addressed by project-specific plans. Mitigation measures protecting these resources will be required to be incorporated into the project POD. These mitigation measures will include the specific programmatic BMPs as well as additional mitigation measures contained in other existing and relevant BLM guidance or stipulations developed to address site-specific or species-specific concerns through project-level analysis.

To the extent that the Programmatic EIS addresses anticipated issues and concerns associated with an individual wind energy project, including potential cumulative impacts, the BLM will, by policy, tier off of the analysis in the Programmatic EIS and limit the scope of additional project-specific NEPA analyses. The site-specific NEPA analyses will include analysis of project site configuration and micrositing considerations, monitoring program requirements, and appropriate site-specific stipulations. In addition, offsite compensatory mitigation may be appropriate to consider for some projects consistent with BLM offsite mitigation policies (see IM 2008-204 dated September 30, 2008).

1) Site-specific or Project Area Applications: The scope of the environmental analysis required for either a site-specific application or a project area application includes direct, indirect, and cumulative effects of the proposed site testing and monitoring-related facilities. The site testing and monitoring right-of-way authorization is for a limited term (3 years) and usually includes only a few wind monitoring towers with instruments attached to measure various meteorological parameters such as wind speed, wind direction, and temperature at various heights above the ground. The footprint for each monitoring tower is small and the need for site clearances should be limited to the areas of proposed surface disturbance and associated areas of potential effect. Some newer technologies using sonar equipment are also being used to collect wind data. This type of equipment also has a small footprint and requires little or no surface disturbance.

The environmental review should not address wind energy development facilities, as the installation of wind turbines are not proposed during site testing and monitoring. The environmental review of wind energy development facilities will occur at the point in time when a wind energy development application is submitted. The reasonably foreseeable development discussions in the environmental analysis for a site testing and monitoring right-of-way application should focus on anticipated installation of additional wind monitoring facilities during the term of the right-of-way grant. Typically only a small number of wind energy site testing and monitoring authorizations ever lead to actual wind energy development projects. Therefore, the reasonably foreseeable development discussion should not focus on uncertain future development scenarios. However, the cumulative impacts of other wind energy site testing activities and any other reasonably foreseeable activities that potentially impact the same environmental resources in the area are required to be addressed in the environmental analysis.

Categorical Exclusion: The use of a Categorical Exclusion (CX) for the issuance of short-term right-of-way authorizations may be applicable to site testing and monitoring activities or sites. The relevant CX as identified by the BLM NEPA Handbook, H-1790-1, Appendix 4, Section E. 19 (January 30, 2008), encompasses "issuance of short-term (3 years or less) rights-of-way or land use authorizations for such uses as storage sites, apiary sites, and construction sites where the proposal includes rehabilitation to restore the land to its natural or original condition." Although the authorization is for a project area, the use is limited to a small site with potentially short-term minimal impacts. The CX for "nondestructive data collection, inventory (including field, aerial, and satellite surveying and mapping), study, research and monitoring activities" may also be applicable to wind energy site testing and monitoring activities. However, these site testing and monitoring activities must be subject to sufficient review to determine if any of the extraordinary circumstances identified in the guidelines apply.

A project area authorization is limited in term to 3 years. Although a project area authorization may be renewed, the holder is required to submit a separate right-of-way application for any wind energy development project. The right-of-way regulations (43 CFR 2807.20) require that the application be submitted and processed consistent with the provisions of 43 CFR Subpart 2804 as a separate and distinct application. The right-of-way grant holder has established no right to development and is required to submit a separate application to BLM for analysis, review, and decision. The proposed wind energy development project will be evaluated upon the submittal of an actual application for the development project. *Alliance to Protect Nantucket Sound, Inc. v. United States Department of the Army*, 288 F. Supp.2d 64, 80 (D. Mass. 2003), *affd*, 398 F.3d 105 (1st Cir. 2005), supports the proposition that an authorization to collect wind data and an authorization to develop a wind energy development project are not "connected actions," as that term is defined at 40 CFR 1508.25. The court held that the Army's authorization of a data tower in Nantucket Sound does not automatically trigger the authorization for a wind energy project; that information from the data tower was not required for the wind energy project but may be used if available and relevant; and that the data tower's utility does not depend on the ultimate authorization of the wind energy project. A contrary decision was reached in *Blue Ocean Preservation Society v. Secretary of Energy*, 754 F. Supp. 1450 (D. Hawaii 1991), so it is advisable to consult with the Solicitor's Office in complex cases.

2) Development Application: The scope of the NEPA analysis and the compliance requirements with the Endangered Species Act, the National Historic Preservation Act, and other laws for a wind energy development right-of-way application will be broader than a site testing and monitoring application as the installation of wind turbines, access roads, and electrical transmission facilities will be addressed in the wind energy development NEPA analysis. However, the footprint of wind energy facilities is typically smaller than other types of energy production facilities. The level of site clearances should be limited to the areas of proposed surface disturbances and associated areas of potential effect, including the access roads to wind turbine locations as well as the electrical transmission and other support facilities. The wind energy development facilities, however, may extend over a large geographic area and have a broad area of influence. The potential impact from these facilities may, therefore, extend beyond the small footprint of the individual wind turbine locations and it may be necessary to provide setbacks from important natural resource areas.

The reasonably foreseeable development discussion in the environmental analysis for a wind energy development project should focus on the potential for installation of additional wind turbines and increased production and electrical transmission from the project area. In addition, the cumulative impacts of other wind energy projects and any other reasonably foreseeable projects that potentially impact the same environmental resources in the area are required to be addressed in the environmental analysis. Project-specific environmental analyses for wind energy development tiered to the analyses conducted in the Programmatic EIS allow the project-specific analyses to focus just on the critical, site-specific issues of concern. For this reason, tiering to the Programmatic EIS is the preferred approach when appropriate. Tiering to the Programmatic EIS would allow for the preparation of an Environmental Assessment (EA) for an individual action as long as the remaining effects of the individual action are not significant. The level of NEPA documentation necessary will be determined based on the context and intensity of the proposed action and how much analysis may be tiered to the Programmatic EIS. It may also be possible to combine the required environmental review process for a wind energy development project with applicable state or local environmental procedures for energy facility siting. This would both streamline the process and be consistent with Departmental policy on intergovernmental cooperation.

LR 2000 Data Entry: Commodity code 974 (Wind Energy Facilities) will generally be used with case type 285003 to identify wind energy site testing and development right-of-way applications and authorizations, and ancillary facilities that are authorized with the same grant as the wind facility. Commodity code 974 will not be used for ancillary rights-of-way (transmission lines and roads) that are authorized as separate grants. Action codes were also established in LR 2000 in September 2005 to track compliance with the customer service standards of the right-of-way regulations. These Action codes also apply to wind energy applications and authorizations. The Remarks section of LR 2000 for a wind energy site testing and monitoring case is required to identify the number of meteorological towers authorized and located on the public land. In addition, the Remarks section for a wind energy development case is required to identify the number of turbines and total MW capacity authorized and located on the public land.

Timeframe: This IM is effective immediately upon receipt. Pending applications will be processed consistent with the provisions of this IM. Existing wind energy right-of-way authorizations requiring amendments may include provisions of this IM. Any amendment of an existing wind energy right-of-way grant that includes an adjustment of rental provisions consistent with this IM will be effective at the next billing date after the amendment is made.

Budget Impact: The application of this policy will have some impact on budget. However, wind energy right-of-way applications are subject to the cost recovery provisions of the regulations and most applications for a wind energy development right-of-way will probably meet the criteria for full reasonable costs (43 CFR 2804.14(b)). In addition, BLM monitoring activities are also subject to the cost recovery provisions of the regulations. Workload impacts should be clarified through the streamlined procedures identified by this IM and by the priority established for processing wind energy right-of-way applications. There is also a positive impact through the implementation of consistent procedures in the processing of wind energy rightâ€'ofâ€'way applications.

Background: As part of an overall strategy to develop a diverse portfolio of domestic energy supplies for our future, the National Energy Policy of 2001 and the Energy Policy Act of 2005 (Public Law 109-58, August 8, 2005) encourage the development of renewable energy resources, including wind energy. Section 211 of the Energy Policy Act established a goal that the BLM would approve 10,000 megawatts of non-hydropower renewable energy projects on the public lands by 2015. The development of wind energy will be an important contribution to that goal. The BLM Energy and Mineral Policy, signed by the Director on August 26, 2008, also recognizes that the public lands are an important source of the Nation's renewable energy resources, including wind energy.

The United States has significant potential for wind energy development, especially on Federal lands in the West. The Federal wind energy production tax credit, stateâ€'level tax credits, and other incentives, including renewable energy portfolio standards in several states, have generated a strong interest in commercial wind energy projects on BLM-administered public lands. Project proposals on public land will create a workload that demands a commitment of resources and a priority to the timely and consistent processing of right-of-way applications for wind energy site testing and monitoring activities and for commercial wind energy development.

Manual/Handbook Sections Affected: This Instruction Memorandum and policy amends BLM Right-of-Way Management Manual 2801 and Handbook H-2801-1.

Coordination: This IM incorporates the policies and BMPs established by the Programmatic EIS and associated ROD. Preparation of the Programmatic EIS provided an opportunity for public comment and input on the proposed BLM wind energy program, policies, and BMPs as well as land use plan amendments. Preparation of this IM was coordinated with the Division of Decision Support, Planning and NEPA (WO-210), the Division of Fish, Wildlife and Plant Conservation (WO-230), and the Division of Recreation and Visitor Services (WO-250). The BLM state offices were also provided an opportunity to review the IM and provide input prior to finalization.

Contact: If you have any questions concerning the content of this IM, please contact Michael D. Nedd, Assistant Director, Minerals and Realty Management, at 202-208-4201, or your staff may contact the BLM Land, Realty and Cadastral Survey Division (WO-350). Points of contact for wind energy right-of-way questions include Rick Stamm, Realty Specialist, at 202-452-5185 and Ray Brady, Energy Policy Lead, at 202-557-3378.

Signed by:
Henri R. Bisson
Acting, Director

Authenticated by:
Robert M. Williams
Division of IRM Governance,WO-560

2 Attachments
1 – BLM Wind Energy Program – Policies and Best Management Practices (19 pp)
2 – Wind Energy Plan of Development (4 pp)

BLM WIND ENERGY PROGRAM
POLICIES AND BEST MANAGEMENT PRACTICES (BMPS)

The BLM has established a number of policies and BMPs, provided below, regarding the development of wind energy resources on BLM-administered public lands. The policies and BMPs are applicable to all wind energy development projects on BLM-administered public lands. The policies address the administration of wind energy development activities, and the BMPs identify required mitigation measures that will be incorporated into project-specific Plans of Development (PODs) and right-of-way (ROW) authorization stipulations. Additional mitigation measures will be applied to individual projects, in the form of stipulations in the ROW authorization as appropriate, to address site-specific and species-specific issues.

Policies

- The BLM will not issue ROW authorizations for wind energy development for areas in which wind energy development is incompatible with specific resource values. Specific lands excluded from wind energy site monitoring and testing and wind energy development include designated areas that are part of the National Landscape Conservation System (NLCS) (e.g., Wilderness Areas, Wilderness Study Areas, National Monuments, National Conservation Areas[1], Wild and Scenic Rivers, and National Historic and Scenic Trails). Additional areas may be excluded from wind energy development based on resource impacts that cannot be mitigated and/or conflict with existing and multiple-use activities or land use plans. Areas of Critical Environmental Concern (ACEC) are not universally excluded from wind energy site monitoring and testing or wind energy development, but will be managed consistent with the management prescriptions for the individual ACEC.

- To the extent possible, wind energy projects shall be developed in a manner that will not prevent other land uses, including minerals extraction, livestock grazing, recreational use, and other ROW uses.

- Entities seeking to develop a wind energy project on BLM-administered lands shall consult with appropriate Federal, State, and local agencies regarding specific projects as early in the planning process as appropriate to ensure that all potential construction, operation, and decommissioning issues and concerns are identified and adequately addressed.

- The BLM will initiate government-to-government consultation with Indian tribal governments whose interests might be directly and substantially affected

[1] Wind energy development is permitted in one NCA, the California Desert Conservation Area (CDCA), in accordance with the provisions of the *California Desert Conservation Area Plan 1980, as Amended*.

by activities on BLM-administered lands as early in the planning process as appropriate to ensure that construction, operation, and decommissioning issues and concerns are identified and adequately addressed.

- Entities seeking to develop a wind energy project on BLM-administered lands shall consult with the U.S. Department of Defense (DOD), in conjunction with BLM Washington Office and Field Office staff, regarding the location of wind power projects and turbine siting as early in the planning process as appropriate. This consultation shall occur concurrently at both the installation/field level and the Pentagon/BLM Washington Office level. The consultation process is outlined in an interagency protocol agreement.

- The BLM will consult with the U.S. Fish and Wildlife Service (USFWS) as required by Section 7 of the Endangered Species Act of 1973 (ESA). The specific consultation requirements will be determined on a project-by-project basis.

- The BLM will consult with the State Historic Preservation Office (SHPO) as required by Section 106 of the National Historic Preservation Act of 1966 (NHPA). The specific consultation requirements will be determined on a project-by-project basis. If programmatic section 106 consultations have been conducted and are adequate to cover a proposed project, additional consultation may not be needed.

- Existing land use plans will be amended, as appropriate, to (1) adopt provisions of the BLM's Wind Energy Development Program, (2) identify land considered available for wind energy development, and (3) identify land that will not be available for wind energy development.

- The level of environmental analysis to be required under the National Environmental Policy Act (NEPA) for individual wind power projects will be determined at the field office level. For many projects, it may be determined that a tiered environmental assessment (EA) is appropriate in lieu of an Environmental Impact Statement (EIS). To the extent that the Programmatic EIS (PEIS) addresses anticipated issues and concerns associated with an individual project, including potential cumulative impacts, the BLM will tier based on the decisions embedded in the PEIS and limit the scope of additional project-specific NEPA analyses. The site-specific NEPA analyses will include analyses of project site configuration and micrositing considerations, monitoring program requirements, and appropriate mitigation measures. In particular, the mitigation measures discussed in chapter 5 of the PEIS may be consulted in determining site-specific requirements. Public involvement will be incorporated into all wind energy development projects to ensure that all concerns and issues are identified and adequately addressed. In general, the scope of the NEPA analyses will be limited to the proposed action on BLM-administered public lands; however, if access to proposed development

on adjacent non-BLM-administered lands is entirely dependent on obtaining ROW access across BLM-administered public lands and there are no alternatives to that access, the NEPA analysis for the proposed ROW may need to assess the environmental effects from that proposed development. The BLM's analyses of ROW access projects may tier based on the PEIS to the extent that the proposed project falls within the scope of the PEIS analyses.

- Site-specific environmental analyses will tier from the PEIS and identify and assess any cumulative impacts that are beyond the scope of the cumulative impacts addressed in the PEIS.

- The Categorical Exclusion (CX) applicable to the issuance of short-term ROWs or land use authorizations may be applicable to some site monitoring and testing activities. The relevant CX, established in the BLM NEPA Handbook, H-1790-1, Appendix 4, Section E. 19 (January 30, 2008), encompasses "issuance of short-term (3 years or less) rights-of-way or land use authorizations for such uses as storage sites, apiary sites, and construction sites where the proposal includes rehabilitation to restore the land to its natural or original condition." The CX for "nondestructive data collection, inventory, study, research, and monitoring activities" may also be applicable to wind energy site testing and monitoring activities.

- The BLM will require financial bonds for all wind energy development projects on BLM-administered public lands to ensure compliance with the terms and conditions of the rights-of-way authorization and the requirements of applicable regulatory requirements, including reclamation costs. The amount of the required bond will be determined during the rights-of-way authorization process on the basis of site-specific and project-specific factors. A minimum bond will be required for site monitoring and testing authorizations.

- Entities seeking to develop a wind energy project on BLM-administered public lands shall develop a project-specific Plan of Development (POD) that incorporates all BMPs and, as appropriate, the requirements of other existing and relevant BLM mitigation guidance, including the BLM's offsite mitigation guidance. Additional mitigation measures will be incorporated into the POD and into the ROW authorization as project stipulations, as needed, to address site-specific and species-specific issues. The POD will include a site plan showing the locations of turbines, roads, power lines, other infrastructure, and other areas of short- and long-term disturbance.

- The BLM will incorporate management goals and objectives specific to habitat conservation for species of concern (e.g., sage-grouse, raptors, bats), as appropriate, into the POD for proposed wind energy projects.

- The BLM will consider the visual resource values of the public lands involved in proposed wind energy development projects, consistent with BLM Visual Resource Management (VRM) policies and guidance. The BLM will work with the ROW applicant to incorporate visual design considerations into the planning and design of the project to minimize potential visual impacts of the proposal and to meet the VRM objectives of the area.

- Operators of wind power facilities on BLM-administered public lands shall consult with the BLM and other appropriate Federal, State, and local agencies regarding any planned upgrades or changes to the wind facility design or operation. Proposed changes of this nature may require additional environmental analysis and/or revision of the POD.

- The BLM's Wind Energy Development Program will incorporate adaptive management strategies to ensure that potential adverse impacts of wind energy development are avoided if possible, minimized, or mitigated to acceptable levels. The programmatic policies and BMPs will be updated and revised as new data regarding the impacts of wind power projects become available. At the project-level, operators will be required to develop monitoring programs to evaluate the environmental conditions at the site through all phases of development, establish metrics against which monitoring observations can be measured, identify potential mitigation measures, and establish protocols for incorporating monitoring observations and additional mitigation measures into standard operating procedures and project-specific stipulations.

Best Management Practices (BMPs)

The following BMPs will be adopted as required elements of project-specific PODs and/or as ROW authorization stipulations. They are categorized by development activity: site monitoring and testing, development of the POD, construction, operation, and decommissioning. The BMPs for development of the POD identify required elements of the POD needed to address potential impacts associated with subsequent phases of development.

1. Site Monitoring and Testing

- The area disturbed by installation of meteorological towers (i.e., footprint) shall be kept to a minimum.

- Existing roads shall be used to the maximum extent feasible. If new roads are necessary, they shall be designed and constructed to the appropriate BLM road design standards.

- Meteorological towers shall be located to avoid sensitive habitats or areas where ecological resources known to be sensitive to human activities (e.g., prairie grouse) are present. Installation of towers shall be scheduled to

avoid disruption of wildlife reproductive activities or other important behaviors, and shall be consistent with sage grouse management strategies.

- Guy wires on permanent meteorological towers shall be avoided, however, may be necessary on temporary meteorological towers installed during site monitoring and testing. If guy wires are necessary, the meteorological towers shall be periodically inspected to determine whether permanent markers (bird flight diverters) attached to the guy wires are necessary to increase visibility.

- Meteorological towers installed for site monitoring and testing shall be inspected periodically (at least every 6 months) for structural integrity.

- A study design strategy shall be required for any environmental studies initiated or baseline data collected during the site testing and monitoring period. The operator shall submit the study design strategy to the BLM authorized officer for review.

2. Plan of Development Preparation

General

- The BLM and operators shall contact appropriate agencies, property owners, and other stakeholders early in the planning process to identify potentially sensitive land uses and issues, rules that govern wind energy development locally, and land use concerns specific to the region.

- Available information describing the environmental and sociocultural conditions in the vicinity of the proposed project shall be collected and reviewed as needed to predict potential impacts of the project.

- The Federal Aviation Administration (FAA)-required notice of proposed construction shall be made as early as possible to identify any required air safety measures.

- To plan for efficient use of the land, necessary infrastructure requirements shall be consolidated wherever possible, and current transmission and market access shall be evaluated carefully.

- The project shall be planned to utilize existing roads and utility corridors to the maximum extent feasible and to minimize the number and length/size of new roads, lay-down areas, and borrow areas.

- A monitoring program shall be developed to ensure that environmental conditions are monitored during the construction, operation, and decommissioning phases. The monitoring program requirements, including adaptive management strategies, shall be established at the project level to

ensure that potential adverse impacts of wind energy development are mitigated. The monitoring program shall identify the monitoring requirements for each environmental resource present at the site, establish metrics against which monitoring observations can be measured, identify potential mitigation measures, and establish protocols for incorporating monitoring observations and additional mitigation measures into standard operating procedures and BMPs.

- "Good housekeeping" procedures shall be developed to ensure that during operation the site will be kept clean of debris, garbage, fugitive trash or waste, and graffiti; to prohibit scrap heaps and dumps; and to minimize storage yards.

Wildlife and Other Ecological Resources

- Operators shall review existing information on species and habitats in the vicinity of the project area to identify potential concerns.

- Operators shall conduct surveys for Federal and/or State-protected species and other species of concern (including priority wildlife and special status plant and animal species) within the project area and design the project to avoid, minimize, or mitigate impacts to these resources.

- Operators shall identify important, sensitive, or unique habitats in the vicinity of the project and design the project to avoid, minimize, or mitigate impacts to these habitats (e.g., locate the turbines, roads, and ancillary facilities in the least environmentally sensitive areas; i.e., away from riparian habitats, streams, wetlands, drainages, or critical wildlife habitats).

- The BLM will prohibit the disturbance of any population of federally listed plant species under the Endangered Species Act.

- Operators shall evaluate avian and bat use of the project area and design the project to minimize or mitigate the potential for bird and bat strikes (e.g., development shall not occur in riparian habitats and wetlands). Avian and bat use surveys consistent with current methodologies and standards shall be conducted; the amount and extent of ecological baseline data required shall be determined on a project basis.

- Turbines shall be configured to avoid landscape features known to attract raptors if site studies show that placing turbines there would pose a significant risk to raptors.

- Operators shall determine the presence of bat colonies and avoid placing turbines near known bat hibernation, breeding, and maternity/nursery colonies; in known migration corridors; or in known flight paths between colonies and feeding areas.

- Operators shall determine the presence of active raptor nests (i.e., raptor nests used during the breeding season) and design the project to provide for spatial buffers and timing restrictions for surface disturbing activities. Measures to reduce raptor use at a project site (e.g., minimize road cuts, maintain either no vegetation or plant species that are unattractive to raptors around the turbines) shall also be identified.

- A habitat restoration plan shall be developed to avoid, minimize, or mitigate negative impacts on vulnerable wildlife while maintaining or enhancing habitat values for other species. The plan shall identify reclamation, soil stabilization, and erosion reduction measures that shall be implemented to ensure that all temporary use areas are restored. The plan shall require that restoration occur as soon as possible after completion of activities to reduce the amount of habitat converted at any one time and to speed up the recovery to natural habitats.

- Procedures shall be developed to mitigate potential impacts to special status species and other priority wildlife species. Such measures may include avoidance, relocation of project facilities or lay-down areas, and/or relocation of biota.

- Facilities shall be designed to discourage their use as perching or nesting substrates by birds. For example, power lines and poles shall be configured to minimize raptor electrocutions and discourage raptor and raven nesting and perching.

Visual Resources

- The public shall be involved and informed about the visual site design elements of the proposed wind energy facilities. Possible approaches include conducting public forums for disseminating information, offering organized tours of operating wind developments, and using computer and visualization simulations in public presentations.

- Visual resource management (VRM) considerations shall take place early in the project planning phase in accordance with BLM VRM manual and handbooks. Operators shall utilize digital terrain mapping tools at a landscape/viewshed scale for site planning and design, visual impact analysis, and visual impact mitigation planning and design. Visual mitigation planning and design shall be performed through field assessments, applied GPS technology, photo documentation, use of computer-aided design and development software, and visual simulations to reflect a full range of visual resource best management practices. The digital terrain mapping tools shall be at a resolution and contour interval suitable for site design and accurate placement of proposed developments into the digital viewshed. Visual

simulations shall be prepared and evaluated in accordance with BLM Handbook H-8432-1, or other agency requirements, to create spatially accurate depictions of the appearance of proposed facilities. Simulations shall depict proposed project facilities from Key Observation Points and other visual resource sensitive locations.

- Turbine arrays and turbine design shall be integrated with the surrounding landscape. Design elements to be addressed include visual uniformity, use of tubular towers, proportion and color of turbines, nonreflective paints, and prohibition of commercial messages on turbines.

- Other site design elements shall be integrated with the surrounding landscape. Elements to address include minimizing the profile of the ancillary structures, burial of cables, prohibition of commercial symbols, and lighting. Regarding lighting, efforts shall be made to minimize the need for and amount of lighting on ancillary structures.

Roads

- An access road siting and management plan shall be prepared incorporating existing BLM standards regarding road design, construction, and maintenance such as those described in the BLM 9113 Manual and the *Surface Operating Standards and Guidelines for Oil and Gas Exploration and Development* (revised 2007).

Ground Transportation

- A transportation plan shall be developed, particularly for the transport of turbine components, main assembly cranes, and other large pieces of equipment. The plan shall consider specific object sizes, weights, origin, destination, and unique handling requirements and shall evaluate alternative transportation approaches. In addition, the process to be used to comply with unique state requirements and to obtain all necessary permits shall be clearly identified.

- A traffic management plan shall be prepared for the site access roads to ensure that no hazards would result from increased truck traffic and that traffic flow would not be adversely impacted. This plan shall incorporate measures such as informational signs, flaggers when equipment may result in blocked throughways, and traffic cones to identify any necessary changes in temporary lane configuration.

Noise

- Proponents of a wind energy development project shall take measurements to assess the existing background noise levels at a given site and compare them to the anticipated noise levels associated with the proposed project.

Noxious Weeds and Pesticides

- Operators shall develop a plan for control of noxious weeds and invasive species, which could occur as a result of new surface disturbance activities at the site. The plan shall address monitoring, education of personnel on weed identification, the manner in which weeds spread, and methods for treating infestations. The use of certified weed-free mulch and certified weed-free seed shall be required. If trucks and construction equipment are arriving from locations with known invasive vegetation problems, a controlled inspection and cleaning area shall be established to visually inspect construction equipment arriving at the project area and to remove and collect seeds that may be adhering to tires and other equipment surfaces.

- If pesticides are used on the site, an integrated pest management plan shall be developed to ensure that applications will be conducted within the framework of BLM and DOI policies and entail only the use of EPA-registered pesticides. Pesticide use shall be limited to nonpersistent, immobile pesticides and shall only be applied in accordance with label and application permit directions and stipulations for terrestrial and aquatic applications. Any applications of herbicides will be subject to BLM herbicide treatment standard operating procedures. Only herbicides on the list of approved herbicide formulations (updated annually) will be used on public lands.

Cultural/Historic Resources

- The BLM will consult with Indian tribal governments early in the planning process to identify issues regarding the proposed wind energy development, including issues related to the presence of cultural properties, access rights, disruption to traditional cultural practices, and impacts to visual resources important to the tribe(s).

- The presence of archaeological sites and historic properties in the area of potential effect shall be determined on the basis of a records search of recorded sites and properties in the area and/or, depending on the extent and reliability of existing information, an archaeological survey. Archaeological sites and historic properties present in the area of potential effect shall be reviewed to determine whether they meet the criteria of eligibility for listing on the *National Register of Historic Places* (NRHP).

- When any right-of-way application includes remnants of a National Historic Trail, is located within the viewshed of a National Historic Trail's designated centerline, or includes or is within the viewshed of a trail eligible for listing on the NRHP, the operator shall evaluate the potential visual impacts to the trail associated with the proposed project and identify appropriate mitigation measures for inclusion as stipulations in the POD.

- If cultural resources are present at the site, or if areas with a high potential to contain cultural material have been identified, a cultural resources management plan (CRMP) shall be developed. This plan shall address mitigation activities to be taken for cultural resources found at the site. Avoidance of the area is always the preferred mitigation option. Other mitigation options include archaeological survey and excavation, and monitoring. If an area exhibits a high potential, but no artifacts were observed during an archaeological survey, monitoring by a qualified archaeologist may be required during all excavation and earthmoving in the high-potential area. A report shall be prepared documenting these activities. The CRMP also shall (1) establish a monitoring program, (2) identify measures to prevent potential looting/vandalism or erosion impacts, and (3) address the education of workers and the public to make them aware of the consequences of unauthorized collection of artifacts and destruction of property on public land.

Paleontological Resources

- Operators shall determine whether paleontological resources exist in a project area on the basis of the sedimentary context of the area, a records search for past paleontological finds in the area, and/or, depending on the extent of existing information, a paleontological survey.

- If paleontological resources are present at the site, or if areas with a high potential to contain paleontological material have been identified, a paleontological resources management plan shall be developed. This plan shall include a mitigation plan for collection of the fossils; mitigation may include avoidance, removal of fossils, or monitoring. If an area exhibits a high potential but no fossils were observed during survey, monitoring by a qualified paleontologist may be required during all excavation and earthmoving in the sensitive area. A report shall be prepared documenting these activities. The paleontological resources management plan also shall (1) establish a monitoring program, (2) identify measures to prevent potential looting/vandalism or erosion impacts, and (3) address the education of workers and the public to make them aware of the consequences of unauthorized collection of fossils on public land.

Hazardous Materials and Waste Management

- Operators shall develop a hazardous materials management plan addressing storage, use, transportation, and disposal of each hazardous material anticipated to be used at the site. The plan shall identify all hazardous materials that would be used, stored, or transported at the site. It shall establish inspection procedures, storage requirements, storage quantity limits, inventory control, nonhazardous product substitutes, and disposition of excess materials. The plan shall also identify requirements for notices to Federal and local emergency response authorities and include emergency response plans.

- Operators shall develop a waste management plan identifying the waste streams that are expected to be generated at the site and addressing hazardous waste determination procedures, waste storage locations, waste-specific management and disposal requirements, inspection procedures, and waste minimization procedures. This plan shall address all solid and liquid wastes that may be generated at the site.

- Operators shall develop a spill prevention and response plan identifying where hazardous materials and wastes are stored on site, spill prevention measures to be implemented, training requirements, appropriate spill response actions for each material or waste, the locations of spill response kits on site, a procedure for ensuring that the spill response kits are adequately stocked at all times, and procedures for making timely notifications to authorities.

Storm Water

- Operators shall develop a storm water management plan for the site to ensure compliance with applicable regulations and prevent offsite migration of contaminated storm water or increased soil erosion.

Human Health and Safety

- A safety assessment shall be conducted to describe potential safety issues and the means that would be taken to mitigate them, including issues such as site access, construction, safe work practices, security, heavy equipment transportation, traffic management, emergency procedures, and fire control.

- A health and safety program shall be developed to protect both workers and the general public during construction, operation, and decommissioning of a wind energy project. Regarding occupational health and safety, the program shall identify all applicable Federal and State occupational safety standards; establish safe work practices for each task (e.g., requirements for personal protective equipment and safety harnesses; Occupational Safety and Health Administration (OSHA) standard practices for safe use of explosives and blasting agents; and measures for reducing occupational electric and magnetic

fields (EMF) exposures); establish fire safety evacuation procedures; and define safety performance standards (e.g., electrical system standards and lightning protection standards). The program shall include a training program to identify hazard training requirements for workers for each task and establish procedures for providing required training to all workers. Documentation of training and a mechanism for reporting serious accidents to appropriate agencies shall be established.

- Regarding public health and safety, the health and safety program shall establish a safety zone or setback for wind turbine generators from residences and occupied buildings, roads, rights-of-ways, and other public access areas that is sufficient to prevent accidents resulting from the operation of wind turbine generators. It shall identify requirements for temporary fencing around staging areas, storage yards, and excavations during construction or decommissioning activities. It shall also identify measures to be taken during the operation phase to limit public access to hazardous facilities (e.g., permanent fencing installed only around electrical substations, and turbine tower access doors locked).

- Operators shall consult with local planning authorities regarding increased traffic during the construction phase, including an assessment of the number of vehicles per day, their size, and type. Specific issues of concern (e.g., location of school bus routes and stops) shall be identified and addressed in the traffic management plan.

- If operation of the wind turbines is expected to cause significant adverse impacts to nearby residences and occupied buildings from shadow flicker, low-frequency sound, or EMF, site-specific recommendations for addressing these concerns shall be incorporated into the project design (e.g., establishing a sufficient setback from turbines).

- The project shall be planned to minimize electromagnetic interference (EMI) (e.g., impacts to radar, microwave, television, and radio transmissions) and comply with Federal Communications Commission (FCC) regulations. Signal strength studies shall be conducted when proposed locations have the potential to impact transmissions. Potential interference with public safety communication systems (e.g., radio traffic related to emergency activities) shall be avoided.

- The project shall be planned to comply with Federal Aviation Administration (FAA) regulations, including lighting regulations, and to avoid potential safety issues associated with proximity to airports, military bases or training areas, or landing strips.

- Operators shall develop a fire management strategy to implement measures to minimize the potential for a human-caused fire and respond to natural fire situations.

3. Construction

General

- All control and mitigation measures established for the project in the POD and the resource-specific management plans that are part of the POD shall be maintained and implemented throughout the construction phase, as appropriate.

- The area disturbed by construction and operation of a wind energy development project (i.e., footprint) shall be kept to a minimum.

- The number and size/length of roads, temporary fences, lay-down areas, and borrow areas shall be minimized.

- Topsoil from all excavations and construction activities shall be salvaged and reapplied during reclamation.

- All areas of disturbed soil shall be reclaimed using weed-free native grasses, forbs, and shrubs. Reclamation activities shall be undertaken as early as possible on disturbed areas.

- All electrical collector lines shall be buried in a manner that minimizes additional surface disturbance (e.g., along roads or other paths of surface disturbance). Overhead lines may be used in cases where burial of lines would result in further habitat disturbance.

- Operators shall identify unstable slopes and local factors that can induce slope instability (such as groundwater conditions, precipitation, earthquake activities, slope angles, and the dip angles of geologic strata). Operators also shall avoid creating excessive slopes during excavation and blasting operations. Special construction techniques shall be used where applicable in areas of steep slopes, erodible soil, and stream channel crossings.

- Erosion controls that comply with county, State, and Federal standards shall be applied. Practices such as jute netting, silt fences, and check dams shall be applied near disturbed areas.

Wildlife

- Timing restrictions for construction activities may be implemented to minimize impacts to wildlife.

- In accordance with the habitat restoration plan, restoration shall be undertaken as soon as possible after completion of construction activities to reduce the amount of habitat converted at any one time and to speed up the recovery to natural habitats.

- All construction employees shall be instructed to avoid harassment and disturbance of wildlife, especially during reproductive (e.g., courtship and nesting) seasons. In addition, pets shall not be permitted on site during construction.

Visual Resources

- Operators shall reduce visual impacts during construction by clearly delineating construction boundaries and minimizing areas of surface disturbance; preserving vegetation to the greatest extent possible; utilizing undulating surface disturbance edges; stripping, salvaging and replacing topsoil; contoured grading; controlling erosion; using dust suppression techniques; and restoring exposed soils as closely as possible to their original contour and vegetation.

Roads

- Existing roads shall be used, but only if in safe and environmentally sound locations. If new roads are necessary, they shall be designed and constructed to the appropriate BLM road design standards and be no higher than necessary to accommodate their intended functions (e.g., traffic volume and weight of vehicles). Excessive grades on roads, road embankments, ditches, and drainages shall be avoided, especially in areas with erodible soils. Special construction techniques shall be used, where applicable. Abandoned roads and roads that are no longer needed shall be recontoured and revegetated.

- Access roads and on-site roads shall be surfaced with aggregate materials, wherever appropriate.

- Access roads shall be located to follow natural contours and minimize side hill cuts.

- Roads shall be located away from drainage bottoms and avoid wetlands, if practicable.

- Roads shall be designed so that changes to surface water runoff are avoided and erosion is not initiated.

- Access roads shall be located to minimize stream crossings. All structures crossing streams shall be located and constructed so that they do not decrease

channel stability or increase water velocity. Operators shall obtain all applicable Federal and State permits.

- Existing drainage systems shall not be altered, especially in sensitive areas such as erodible soils or steep slopes. Potential soil erosion shall be controlled at culvert outlets with appropriate structures. Catch basins, roadway ditches, and culverts shall be cleaned and maintained regularly.

Ground Transportation

- Project personnel and contractors shall be instructed and required to adhere to speed limits commensurate with road types, traffic volumes, vehicle types, and site-specific conditions, to ensure safe and efficient traffic flow and to reduce wildlife collisions and disturbance and airborne dust.

- Traffic shall be restricted to the roads developed for the project. Use of other unimproved roads shall be restricted to emergency situations.

- Signs shall be placed along construction roads to identify speed limits, travel restrictions, and other standard traffic control information. To minimize impacts on local commuters, consideration shall be given to limiting construction vehicles traveling on public roadways during the morning and late afternoon commute time. Consideration shall also be given to opportunities for busing of construction workers to the job site to reduce traffic volumes.

Air Emissions

- Dust abatement techniques shall be used on unpaved, unvegetated surfaces to minimize airborne dust.

- Speed limits (e.g., 25 mph [40 km/h]) shall be posted and enforced to reduce airborne fugitive dust.

- Construction materials and stockpiled soils shall be covered if they are a source of fugitive dust.

- Dust abatement techniques shall be used before and during surface clearing, excavation, or blasting activities.

Excavation and Blasting Activities

- Operators shall gain a clear understanding of the local hydrogeology. Areas of groundwater discharge and recharge and their potential relationships with surface water bodies shall be identified.

- Operators shall avoid creating hydrologic conduits between two aquifers during foundation excavation and other activities.

- Foundations and trenches shall be backfilled with originally excavated material as much as possible. Excess excavation materials shall be disposed of only in approved areas or, if suitable, stockpiled for use in reclamation activities.

- Borrow material shall be obtained only from authorized and permitted sites. Existing sites shall be used in preference to new sites.

- Explosives shall be used only within specified times and at specified distances from sensitive wildlife or streams and lakes, as established by the BLM or other Federal and State agencies.

Noise

- Noisy construction activities (including blasting) shall be limited to the least noise-sensitive times of day (i.e., daylight hours only or specified times) and weekdays.

- All equipment shall have sound-control devices no less effective than those provided on the original equipment. All construction equipment used shall be adequately muffled and maintained.

- All stationary construction equipment (i.e., compressors and generators) shall be located as far as practicable from nearby residences.

- If blasting or other noisy activities are required during the construction period, nearby residents shall be notified in advance.

Cultural and Paleontological Resources

- Unexpected discovery of cultural or paleontological resources during construction shall be brought to the attention of the responsible BLM authorized officer immediately. Work shall be halted in the vicinity of the find to avoid further disturbance to the resources while they are being evaluated and appropriate mitigation measures are being developed.

Hazardous Materials and Waste Management

- Secondary containment shall be provided for all onsite hazardous materials and waste storage, including fuel. In particular, fuel storage (for construction vehicles and equipment) shall be a temporary activity occurring only for as long as is needed to support construction activities.

- Wastes shall be properly containerized and removed periodically for disposal at appropriate offsite-permitted disposal facilities.

- In the event of an accidental release of hazardous materials to the environment, the operator shall document the event, including a root cause analysis, appropriate corrective actions taken, and a characterization of the resulting environmental or health and safety impacts. Documentation of the event shall be provided to the BLM authorized officer and other Federal and State agencies, as required.

- Any wastewater generated in association with temporary, portable sanitary facilities shall be periodically removed by a licensed hauler and introduced into an existing municipal sewage treatment facility. Temporary, portable sanitary facilities provided for construction crews shall be adequate to support expected onsite personnel and shall be removed at completion of construction activities.

Public Health and Safety

- Temporary fencing shall be installed around staging areas, storage yards, and excavations during construction to limit public access.

4. Operation

General

- All control and mitigation measures established for the project in the POD and the resource-specific management plans that are part of the POD shall be maintained and implemented throughout the operational phase, as appropriate. These control and mitigation measures shall be reviewed and revised, as needed, to address changing conditions or requirements at the site throughout the operational phase. This adaptive management approach will help ensure that impacts from operations are kept to a minimum.

- Inoperative turbines shall be repaired, replaced, or removed in a timely manner. Requirements to do so shall be incorporated into the due diligence provisions of the rights-of-way authorization. Operators will be required to demonstrate due diligence in the repair, replacement, or removal of turbines; failure to do so may result in termination of the right-of-way authorization.

Wildlife

- Employees, contractors, and site visitors shall be instructed to avoid harassment and disturbance of wildlife, especially during reproductive (e.g., courtship and nesting) seasons. In addition, any pets shall be controlled to avoid harassment and disturbance of wildlife.

- Observations of potential wildlife impacts, including wildlife mortality, shall be reported to the BLM authorized officer immediately.

Visual Resources

- Operators shall monitor and maintain visual mitigation measures for the approved project in accordance with a visual monitoring and compliance plan. The operator shall maintain revegetated surfaces until a self-sustaining stand of vegetation is reestablished and visually adapted to the undisturbed surrounding vegetation. No new disturbance shall be created during operations without completion of a VRM analysis and approval by the authorized officer.

Ground Transportation

- Ongoing ground transportation planning shall be conducted to evaluate road use, minimize traffic volume, and ensure that roads are maintained adequately to minimize associated impacts.

Monitoring Program

- Site monitoring protocols defined in the POD shall be implemented. These will incorporate monitoring program observations and additional mitigation measures into standard operating procedures and BMPs to minimize future environmental impacts.

- Results of monitoring program efforts shall be provided to the BLM authorized officer.

Public Health and Safety

- Permanent fencing shall be installed and maintained around electrical substations, and turbine tower access doors shall be locked to limit public access.

- In the event an installed wind energy development project results in electromagnetic interference (EMI), the operator shall work with the owner of the impacted communications system to resolve the problem. Additional warning information may also need to be conveyed to aircraft with onboard radar systems so that echoes from wind turbines can be quickly recognized.

5. Decommissioning

General

- Prior to the termination of the right-of-way authorization, a decommissioning plan shall be developed and approved by the BLM. The decommissioning plan shall include a site reclamation plan and monitoring program.

- All management plans, BMPs, and stipulations developed for the construction phase shall be applied to similar activities during the decommissioning phase.

- All turbines and ancillary structures shall be removed from the site.

- Topsoil from all decommissioning activities shall be salvaged and reapplied during final reclamation.

- All areas of disturbed soil shall be reclaimed using weed-free native shrubs, grasses, and forbs.

- The vegetation cover, composition, and diversity shall be restored to values commensurate with the ecological setting.

WIND ENERGY PLAN OF DEVELOPMENT

The following outline identifies the minimum requirements for an initial wind energy Plan of Development (POD) to be submitted prior to the end of the 3-year term of a site testing and monitoring authorization. These minimum requirements provide the basic information necessary to begin the National Environmental Policy Act (NEPA) analysis and review process for a wind energy development project. The specific outline format and title for each section of the POD does not have to be consistent with this template; however, the content of the POD needs to include these minimum requirements.

The wind energy POD is a dynamic document that may require additional information during the NEPA review and analysis process. The initial POD template is just that, initial. It may require different information from the applicant depending upon the environmental resources that may be impacted, the location of the proposed project, and the timing of the project. There may be information required from one applicant that is not required by another applicant because of the issues or resources involved.

Wind Energy Plan of Development Outline

1. Project Description
   a. Introduction
      - Describe type of facility and generation capacity (Federal and non-Federal lands)
      - Applicants proposed schedule for project, including anticipated timelines for permitting, construction and operation, and any phased development as appropriate
   b. Proponent's Purpose and Need for the Project
   c. General Facility Description, Design, and Operation
      -Project location, land ownership, and jurisdiction
      -Legal land description of facility (Federal and non-Federal lands)
      -Total acreage and general dimensions of all facilities and components
      -Number and size of wind turbines (Federal and non-Federal lands)
      -Wind turbine configuration and layout (Federal and non-Federal land)
      -Substations, transmission lines, access roads, buildings, parking areas
      -Ancillary facilities (administrative and maintenance facilities and storage sites)
      -Temporary construction workspace, yards, staging areas
      -Water usage, amounts, sources (during construction and operations)
      -Erosion control and stormwater drainage
      -Vegetation treatment, weed management, and any proposed use of herbicides
      -Waste and hazardous materials management
      -Fire protection
      -Site security and fencing proposed (during construction and operations)
      -Electrical components, new equipment and existing system upgrades
      -Interconnection to electrical grid
      -Spill prevention and containment for construction and operation of facility
      -Health and safety program

d. Other Federal, State and Local Agency Permit Requirements
    -Identify required permits (entire project area on both Federal and non-Federal lands)
    -Status of permits
e. Financial and Technical Capability of Applicant

2. Construction of Facilities
    a. Wind turbine design, layout, installation, and construction processes including timetable and sequence of construction
    b. Geotechnical studies that may be planned
    c. Phased projects, describe approach to construction and operations
    d. Access and transportation system, component delivery, worker access
    e. Construction work force numbers, vehicles, equipment, timeframes
    f. Site preparation, surveying, and staking
    g. Site preparation, vegetation removal, and treatment
    h. Site clearing, grading, and excavation
    i. Gravel, aggregate, concrete needs and sources
    j. Wind turbine assembly and construction
    k. Electrical construction activities
    l. Aviation lighting (wind turbines, transmission)
    m. Site stabilization, protection, and reclamation practices

3. Related Facilities and Systems
    a. Transmission System Interconnect
        -Existing and proposed transmission system
        -Ancillary facilities and substations
        -Status of Power Purchase Agreements
        -Status of Interconnect Agreement
        -General design and construction standards
    b. Meteorological Towers
    c. Other Related Systems
        -Communications system requirements (microwave, fiber optics, hard wire, wireless) during construction and operation

4. Operations and Maintenance
    a. Operation and facility maintenance needs
    b. Maintenance activities, including road maintenance
    c. Operations workforce, equipment, and ground transportation

5. Environmental Considerations
    a. General description of site characteristics and potential environmental issues (existing information)
        -Special or sensitive species and habitats
        -Special land use designations
        -Cultural and historic resource sites and values
        -Native American Tribal concerns

-Recreation and OHV conflicts
-Visual Resource Management (VRM) designations
-Aviation and/or military conflicts
-Other environmental considerations

b. Design criteria (mitigation measures) proposed by applicant and included in POD

6. Maps and Drawings
   a. Maps with footprint of wind facility (7.5 min topographic maps or equivalent to include references to Public Land Survey system)
   b. Initial design drawings of wind facility layout and installation, electrical facilities, and ancillary facilities. These initial design drawings will typically be a 30% Engineering and Civil Design package to adequately describe the proposed project and evaluate the design considerations for soils, drainage, and watershed management.
   c. Initial site grading plan
   d. Maps with transmission facilities, substations, distribution, communications
   e. Access and transportation maps
   f. Preliminary visual resource evaluation and visual resource simulations

Supplementary Information

Additional supplementary information will be required from the applicant in order to prepare the NEPA analysis and complete the review process but is not required to be submitted with the initial POD. This information is developed as further data is gathered onsite and as alternative designs and mitigation measures are incorporated into a final POD. Other environmental data and inventory information (including but not limited to cultural resources, sensitive species, and other biological data) will also be required to be collected by the applicant in order to prepare the NEPA analysis.

1. Engineering and Civil Design
   a. Facility survey and design drawing standards
   b. Final engineering and civil design packages for all wind energy facilities, electrical facilities, and ancillary facilities that incorporate all mitigation measures developed in the NEPA analysis and incorporated into the final POD
   c. Aviation lighting plan
   d. Watershed protection and erosion control design drawings
   e. Final site grading plans
   f. Visual resource evaluation, final simulations, and mitigation strategy

2. Alternatives Considered by the Applicant
   a. Alternative site evaluation criteria
   b. Alternatives considered but not carried forward by proponent
   c. Comparative analysis of proponents alternatives
   d. Alternative site configurations

3. Facility Management Plans
   a. Stormwater Pollution Prevention and Protection Plan
   b. Hazardous Materials Management Plan

c. Waste Management Plan
d. Invasive Species and Noxious Weed Management Plan
e. Health and Safety Plan (meeting OSHA requirements)
f. Environmental Inspection and Compliance Monitoring Plan

4. Facility Decommissioning
   a. Reclamation and site stabilization planning
   b. Temporary reclamation of disturbed areas
   c. Removal of wind turbines and substation facilities
   d. Removal of other ancillary facilities