UNITED STATES
DEPARTMENT OF THE INTERIOR
Bureau of Land Management
Burns District Office
Andrews Resource Area
Finding of No Significant Impact

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.

Horizon is requesting the ROW amendment to ensure exclusive use of the project area and continued wind data collection while a National Environmental Policy Act (NEPA) document and related studies for a commercial wind energy development facility can be analyzed by the BLM. Temporary met poles allow Horizon 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 would allow Horizon to make an informed decision concerning indepth wind power project development activities in the project area.

SUMMARY OF THE PROPOSED ACTION

The BLM would renew the existing ROW grant for a wind energy site testing and monitoring project area with a term of three additional years as requested by Horizon in its application and plan of development. In addition, the BLM would grant Horizon continued access to and operation of two existing met poles; the ability to install, operate, and maintain two new met poles; exclusive use for wind energy on an additional 467.75 acres in the project area; and the ability to perform geotechnical studies.

FINDING OF NO SIGNIFICANT IMPACT

Consideration of the Council on Environmental Quality (CEQ) criteria for significance (40 CFR 1508.27), both with regard to context and intensity of impacts, is described below:

Context

The Proposed Action would occur in the Pueblo Mountains and would have local impacts on affected interests, lands, and resources similar to and within the scope of those described and considered in the Andrews Management Unit/Steens Mountain Cooperative Management and Protection Area (AMU/CMPA) Proposed Resource Management Plan (PRMP)/Final Environmental Impact Statement (FEIS) August 2004, and the Final Programmatic EIS on Wind Energy Development on BLM-Administered Lands in the Western United States (BLM, June 2005). There would be no substantial broad societal or regional impacts not previously considered in the PRMP/FEIS. The actions described represent anticipated program adjustments complying with the AMU RMP/Record of Decision (ROD): Implementation of a Wind Energy Development Program and Associated Land Use Plan Amendments (BLM, December 2005) and implementation of the Lands and Realty Programs within the scope and context of this document.

Intensity

The CEQ's ten considerations for evaluating intensity (severity of effect):

1. *Impacts that may be both beneficial and adverse.* The EA considered potential beneficial and adverse effects. Grant stipulations (terms and conditions) were incorporated to reduce impacts to sage-grouse, wildlife, cattle, birds, and aircraft. None of the effects are beyond the range of effects analyzed in the AMU/Steens Mountain CMPA PRMP/FEIS 2004 to which the EA is tiered in addition to the Final Programmatic EIS on Wind Energy Development on BLM-Administered Lands in the Western United States.

2. *Degree to which the Proposed Action affects public health and safety.* No aspect of the Proposed Action, Alternatives, or No Action Alternative would have an effect on public health and safety.

3. *Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.* There are no park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas in the project area. An archaeological clearance was completed of the met tower locations in September 2008 and no concerns were identified. An intensive inventory has been previously conducted to evaluate the presence of wilderness characteristics on BLM-administered lands in the project area. The final decision determined that wilderness character was not present on BLM-administered lands in the project area (Wilderness Review Intensive Inventory in Oregon and Washington, March 1980). In 2003, BLM updated its wilderness inventory for the BLM-administered lands in the project area and as part of that update considered wilderness inventory information submitted by the Oregon Natural Desert Association. No changes were identified that would modify the findings of the 1980 inventory. BLM has thus determined that BLM-administered lands in the project area do not possess wilderness character and as a result. There are no other unique characteristics for the project area.

4. *The degree to which effects on the quality of the human environment are likely to be highly controversial.* No unique or appreciable scientific controversy has been identified regarding the effects of the Proposed Action, the Alternative, or the No Action Alternative.

5. *Degree to which possible effects on the human environment are highly uncertain or involve unique or unknown risks.* The analysis has not shown there would be any unique or unknown risks to the human environment nor were any identified in the AMU/Steens Mountain CMPA PRMP/FEIS 2004 to which the EA is tiered in addition to the Final Programmatic EIS on Wind Energy Development on BLM-Administered Lands in the Western United States.

6. *Degree to which the action may establish a precedent for future actions with significant impacts or represents a decision in principle about a future consideration.* This project neither establishes a precedent nor represents a decision in principle about future actions. The project allows Horizon continued wind data collection while the BLM prepares and analyzes a NEPA document and related studies for a commercial wind energy development facility, a complete and separate Federal action. No long-term commitment of resources causing significant impacts was noted in the EA or RMP/ROD.

7. W*hether the action is related to other actions with individually insignificant but cumulatively significant impacts.* The environmental analysis did not reveal any cumulative effects beyond those already analyzed in the AMU/Steens Mountain CMPA PRMP/FEIS 2004 which encompasses the Pueblo Mountain Wind Site Testing and Monitoring Project Area.

8. *Degree to which the action may adversely affect districts, sites, highways, structures or objects listed in or eligible for listing in the National Register of Historic Places.* There are no features within the project area listed or eligible for listing in the National Register of Historic Places.

9. *The degree to which the action may adversely affect an endangered or threatened species or its habitat.* There are no known threatened or endangered species or their habitat affected by the Proposed Action, the Alternative, or the No Action Alternative.

10. *Whether an action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.* The Proposed Action, the Alternative, or the No Action Alternative does not threaten to violate any law. The Proposed Action is in compliance with the AMU RMP/ROD 2005, which provides direction for the protection of the environment on public lands.

On the basis of the information contained in the EA and all other information available to me, it is my determination that:

1) The implementation of the Proposed Action, the Alternative, or the No Action Alternative will not have significant environmental impacts beyond those already addressed in the AMU/CMPA PRMP/FEIS (2004);

2) The Proposed Action, the Alternative, or the No Action Alternative are in conformance with the AMU RMP/ROD 2005;

3) There would be no adverse societal or regional impacts and no adverse impacts to affected interests; and

4) The environmental effects, together with the proposed grant stipulations (terms and conditions), against the tests of significance found at 40 CFR 1508.27 do not constitute a major Federal action having a significant effect on the human environment.

Therefore, an EIS is not necessary and will not be prepared.

_____ _____

Joan M. Suther Date
Andrews Resource Area Field Manager

Horizon Wind Energy
Northwest X LLC
Pueblo Mountain
Wind Energy Site Testing and Monitoring Project Area

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Bureau of Land Management
Burns District Office
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November 5, 2008

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CHAPTER I: PURPOSE OF AND NEED FOR ACTION

A. Introduction

On November 13, 2006, the U.S. Bureau of Land Management (BLM) issued a Right-of-Way (ROW) grant to a private wind power development company, Horizon Wind Energy Northwest X LLC (Horizon), under Title V of the Federal Land Policy and Management Act (FLPMA) of 1976. The grant authorized Horizon to construct, operate, maintain, and terminate a wind energy site testing and monitoring project in the Pueblo Mountains of Harney County, Oregon. The ROW grant serial number is OR-63580. The grant specifically provided Horizon with a right to construct, operate, maintain, and terminate (decommission) two meteorological poles (met poles) and gave Horizon an exclusive wind energy monitoring project area of 17,514.48 acres. ROW grant OR-63580 expires on December 31, 2008, unless it is renewed subject to all regulations existing at the time of renewal.

An ROW application amendment and Plan of Development (POD) for OR-63580 Pueblo Mountain was filed on July 7, 2008, to extend the original term of the Pueblo Mountain wind energy site testing and monitoring project for an additional 3 years. This ROW application amendment would allow Horizon to: continue testing while a separate ROW application and POD for commercial wind energy development can be analyzed; install two additional met poles in the Pueblo Mountain Project Area; add 467.75 acres to the Pueblo Mountain Project Area; and conduct geotechnical studies. In support of this application amendment, a complete ROW application, POD, and cost recovery payment for commercial wind energy development facilities, OR-65553 Pueblo Mountain, would be submitted for analysis, review, and decision as required under the BLM Instruction Memorandum (IM) 2006-216, Right-of-Way Management, Wind Energy (2006).

B. Purpose and Need for Action

The purpose of this action is to analyze whether or not and under what terms and conditions to amend and renew ROW grant OR-63580 to continue the authorized use of BLM-administered land for a wind energy site testing and monitoring project within the Pueblo Mountains.

Horizon is requesting the ROW amendment to ensure exclusive use of the project area and continued wind data collection while a National Environmental Policy Act (NEPA) document and related studies for a commercial wind energy development facility can be analyzed by the BLM. Temporary met poles allow Horizon 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 would allow Horizon to make an informed decision concerning indepth wind power project development activities in the project area.

Wind power projects can have public benefits, providing clean domestic energy and diversifying the country's energy resource portfolio. There is already an established Federal record showing the national need for wind power projects:

The Energy Policy Act of 2005 (P.L. 109-58). Section 211 states, "It is the sense of the Congress that the Secretary of the Interior should, before the end of the 10-year period beginning on the date of enactment of this Act, seek to have approved non-hydropower renewable energy projects located on the public lands with a generation capacity of at least 10,000 megawatts of electricity."

President's Executive Order (E.O.) 13212 (2001), "Actions to Expedite Energy-Related Projects," established a policy that Federal agencies should take appropriate actions, to the extent consistent with applicable law, to expedite projects to increase the production, transmission, or conservation of energy.

The National Energy Policy Development Group (2001) recommended to the President, as part of the National Energy Policy, that the Departments of the Interior, Energy, Agriculture, and Defense work together to increase renewable energy production.

To address increased interest in wind energy development and to implement the National Energy Policy recommendation to increase renewable energy production, the BLM established a wind energy development program. This program, which included the amendment of multiple land use plans, supported the directives of E.O. 13212, the recommendations of the National Energy Policy, and Congressional direction provided in the Energy Policy Act of 2005 regarding renewable energy development on public lands. The Wind Energy Development Program was evaluated through preparation of a Final Programmatic Environmental Impact Statement (EIS) on Wind Energy Development on BLM-Administered Lands in the Western United States (BLM, 2005). The BLM's Wind Energy Development Program includes policies and Best Management Practices (BMPs) to ensure that potential adverse environmental impacts to public lands are minimized to the extent possible.

Oregon Senate Bill (SB) 838 establishes a renewable electricity portfolio standard for the State. SB 838 requires the State's largest utilities to meet 25 percent of their electric load with new renewable energy sources by 2025. The bill includes interim targets of 5 percent by 2011; 15 percent by 2015; 20 percent by 2020; and 25 percent by 2025.

Sources of energy that count toward the standard include wind, solar, wave, geothermal, biomass, new hydro or efficiency upgrades to existing hydro facilities.

1. Goals and Objectives

   The BLM goal in preparing its decision on the application is to provide authorizations for public and private uses while maintaining and improving resource values and public land administration. The objective of the BLM in making its decision is to meet public, private, and Federal agency needs for realty-related land use authorizations, including those authorizations necessary for wind and other forms of renewable energy development, as stated in the Andrews Resource Management Plan (RMP) and Record of Decision (ROD) (BLM, August 2005), page 59.

2. Decision Framework

   The Andrews Resource Area Field Manager is the responsible official who will decide which alternative analyzed in this Environmental Assessment (EA) best meets the purpose and need for action based on the interdisciplinary analysis presented here. The decision will specify all terms and conditions intended to mitigate any regulatory or environmental effects of the Proposed Action.

3. Decision Factors

   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. The following Decisions Factors will be relied upon by the authorized officer in selecting a course of action from the range of alternatives fully analyzed that best achieves the goals and objectives of the project:

   a. Would the alternatives balance the proposed project's purpose and need with the BLM's other responsibilities to manage lands it administers?

   b. Would the alternatives have unreasonable management costs to the public in achieving the purpose and need?

   c. Do the alternatives have unreasonable costs to the applicant (Horizon) in achieving the purpose and need?

4. Conformance with Land Use Plans, Laws, Regulations, and Policy

   The following documents provide the framework and guidance for management of BLM lands within the Burns District relevant to the Proposed Action:

a. Andrews Management Unit/Steens Mountain Cooperative Management and Protection Area Proposed RMP/Final EIS (AMU/CMPA PRMP/FEIS) (August 2004) (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 IM 2006-216. Right-of-Way Management, Wind Energy (2006)

e. Bureau of Land Management 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. NEPA, 42 U.S.C. 4321-4347 (1970)

h. FLPMA, 43 U.S.C. 1701 (1976)

i. Code of Federal Regulations, Part 2800, ROW under FLPMA

5. Issues Considered but not Analyzed Further

An intensive inventory has been previously conducted to evaluate the presence of wilderness characteristics on BLM-administered lands in the project area. The final decision determined that wilderness character was not present on BLM-administered lands in the project area (Wilderness Review Intensive Inventory in Oregon and Washington, March 1980). In 2003, BLM updated its wilderness inventory for the BLM-administered lands in the project area and as part of that update considered wilderness inventory information submitted by the Oregon Natural Desert Association (ONDA). No changes were identified that would modify the findings of the 1980 inventory. BLM has thus determined that BLM-administered lands in the project area do not possess wilderness character and as a result, this issue will not be analyzed further in this EA. Both the BLM's findings and the ONDA-proposed wilderness inventory information are available for review by the public upon request.

CHAPTER II: ALTERNATIVES INCLUDING THE PROPOSED ACTION

A. No Action Alternative

Under this alternative, the BLM would not renew the existing ROW and would reject the ROW application for additional met poles and geotechnical studies. The applicant would not be authorized to install new met testing poles and its existing ROW grant would expire on December 31, 2008. Meteorological testing and monitoring would cease. Existing met poles would be decommissioned and removed. Activities related to removal of the met poles would be more intensive than the seasonal data collection; removal would take approximately one day.

B. Proposed Action

Under the Proposed Action, the BLM would renew the existing ROW grant for a wind energy site testing and monitoring project area with a term of three additional years as requested by Horizon in its application and POD. In addition, the BLM would grant Horizon continued access to and operation of two existing met poles; the ability to install, operate, and maintain two new met poles; exclusive use for wind energy on an additional 467.75 acres in the project area; and the ability to perform geotechnical studies.

The proposed temporary met poles would be 50m (164 feet) or 60m (197 feet) in height. They are the type of pole Horizon is currently using under its existing ROW grant at Pueblo Mountain. Each sits on a flat base, approximately 3 feet by 3 feet in area. The met pole bases sit on top of the ground. They do not require belowground foundations, and no excavation is required. Leveling of the base area by hand may be required during installation. The poles are made of a galvanized steel tube, 6 to 8 inches in diameter, in a silver/gray nonreflective color. The poles are supported with wire rope guy wires in four directions. Several guy wires extend from the pole to each anchor, located approximately 100 to 170 feet from the pole.

The locations of the project site, poles, and access routes are shown in Appendix A, Exhibit A. The pole locations would be accessed using existing roads as much as practicable. Four-wheel-drive pickup trucks would be used to transport the installation crew (two to four members) and equipment for the met poles. Met pole equipment typically fits in one pickup truck bed. Access would be via existing roads, followed by approximately 1.5 miles of off-road access to one of the new poles (Pueblo 4), and approximately 3 miles of off-road access to the second (Pueblo 3). If necessary, installation equipment may be delivered by helicopter instead of by pickup truck, in which case the crew would arrive by All-Terrain Vehicle (ATV). After installation, visits to the met poles are infrequent. Data are transmitted via cell phone or satellite signal each day, enabling crews to typically limit visits to the poles to once per season.

In addition to data collected by the met poles, data collection and site testing activities would be conducted for other purposes as well. These would include studies such as archaeological clearances, botanical clearances, wildlife surveys, and geotechnical studies. These activities would be anticipated during the 3-year duration of the ROW grant extension. Only the geotechnical studies are anticipated to include ground disturbance.

Geotechnical studies are proposed in order to collect a variety of data, including soil type, thermal resistivity, and electrical resistivity. These studies inform layout design, and are performed at different stages of design. Sample borings are taken along possible permitting corridors during the preliminary site design stage, and test borings are drilled at individual potential turbine sites during the engineering stage, once a near-final layout has been determined shortly before construction. Borings taken during the geotechnical study are anticipated to include approximately four sample borings per mile along the access roads, one boring per mile along transmission lines, and one test boring per turbine site. Additional borings could be drilled for ancillary facilities such as electrical substations and an operations/maintenance facility. Approximately 225 test borings are anticipated.

Each boring hole has a diameter of approximately 6 inches, and a surface area of approximately 28 square inches. After the core is taken, the boring hole would be filled with a bentonite/concrete mixture back to the ground surface. The total estimated area of potential ground disturbance from all 225 sample borings is estimated to be approximately 50 square feet. A truck-mounted drill rig, which does not require site preparation and does not cause additional ground disturbance (except for the bored hole itself), would be used for the borings.

Additional geotechnical studies are anticipated during the ROW extension period for electrical and thermal resistivity testing. These tests are conducted to assist in developing the design for the underground cabling system that would deliver electricity from the wind turbines to the electrical substation, should the wind energy project proceed. At approximately 10 locations in the project area, electrical resistivity is estimated by placing two stakes in the ground and running an electrical charge between them. No excavation is required for electrical resistivity testing. At another 10 locations, soil samples would be taken for study of the site's thermal resistivity. Each of these 10 samples would be approximately one cubic foot in volume, and would disturb approximately one square foot of surface area.

The total estimated area of ground disturbance from the geotechnical studies, including the 225 sample borings, electrical resistivity testing, and 10 thermal resistivity samples, is estimated to be approximately 60 square feet.

The below stipulations (terms and conditions) are included on the standard ROW grant form:

1. This grant or permit would be issued subject to the holder's compliance with all applicable regulations contained in Title 43 Code of Federal Regulations Part 2800.

2. 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 the POD or as directed by the authorized officer.

3. Failure of the holder to comply with applicable law or any provision of this ROW grant or permit shall constitute grounds for suspension or termination thereof.

4. 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.

The ROW grant would include the following additional stipulations (terms and conditions):

5. The holder shall administer the ROW in conformance with the BLM Best Management Practices, established by the ROD for the Implementation of a Wind Energy Development Program, and Associated Land Use Plan Amendments, dated December 2005.

6. 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 POD 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.

7. 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, IM No. 2006-216, or in accordance with the current prevailing law, regulation, and policy at that time.

8. 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.

9. 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.

10. 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.

11. 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.

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

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

14. 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.

15. 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.

16. 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.

17. 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).

18. 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).

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

20. 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.

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

22. 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.

C. Extension-only Alternative

Under this alternative, the BLM would renew ROW grant OR-63580 for a period of three additional years, permitting the continued operation of the existing wind energy site testing and monitoring project, but the BLM would not approve any new met poles. This alternative would allow continued access to and operation of two existing met poles permitted under ROW grant OR-63580. The applicant would not be granted an expansion of its exclusive wind energy monitoring project area of 17,514.48 acres.

D. Alternatives Considered but not Fully Analyzed

Additional locations for new met poles were considered, but not analyzed further. Met pole locations were chosen for Pueblo Mountains based on an analysis of topography, regional meteorological data, transmission availability, and known Oregon Department of Fish and Wildlife (ODFW) 2007 sage-grouse lek locations. Alternative locations within the project area were not feasible because of conflicts with known resources or sub-optimal wind potential. Alternatives outside the project area were not analyzed further because of existing Wilderness Study Area (WSA) boundaries.

CHAPTER III: AFFECTED ENVIRONMENT/ENVIRONMENTAL CONSEQUENCES

A. Identification of Affected Elements of the Human Environment

BLM technical staff reviewed the elements of the human environment, as required by law, regulation, Executive Order, and policy, to determine if they would be affected by the Proposed Action or No Action Alternative. The following tables (1 and 2) summarize the results of that review. Affected elements are shown in bold.

Table 1. Summary of Review of Impacts to Critical Elements of the Human Environment

Critical Elements of the Human Environment	Status	Project Contributes to Cumulative Effects	If Not Affected, why? If Affected, Reference Applicable EA Section, Resource Specialist, and Title
Areas of Critical Environmental Concern (ACECs)	Not Present	No	The project area is not located in an ACEC. Steve Dowlan, Natural Resource Specialist (NRS)
Air Quality (Clean Air Act)	Not Affected	No	Dust produced from vehicle use for installation and maintenance of met poles and studies would be infrequent, short term and not measurable. Jeff Rose, Fire Ecologist
American Indian Traditional Practices	Not Present	No	A clearance was completed in September 2008. No concerns were identified. Scott Thomas, Archaeologist
Cultural Heritage	Not Affected	No	A clearance was completed in September 2008 and a rock stack was found at Pueblo #3. A 10-foot "no construction" stipulation would become part of the authorized grant to the applicant negating any effects. Scott Thomas, Archaeologist
Environmental Justice (Executive Order 12898)	Not Affected	No	The ROW is not expected to have disproportionately high or adverse human health or environmental effects on minority populations and low-income populations. Rhonda Karges, Planning and Environmental Coordinator
Farmlands (prime or unique)	Not Present	No	The project area is not located in prime or unique farmlands. William Andersen, District Range Lead
Flood Plains (Executive Order 13112)	Not Present	No	The ROW does not involve occupancy and modification of flood plains and would not increase the risk of flood loss. Steve Dowlan, NRS
Hazardous Materials or Solid Waste	Not Present	No	The Realty Specialist found no evidence of hazardous materials or solid waste during field visits. No hazardous materials or solid waste would be generated by the project. Holly Orr, Realty Specialist

Critical Elements of the Human Environment		Status	Project Contributes to Cumulative Effects	If Not Affected, why? If Affected, Reference Applicable EA Section, Resource Specialist, and Title
Migratory Birds (Executive Order 13186)		Not Affected	No	Bird flight diverter stipulations would become part of the authorized grant to the applicant negating any effects. Disturbance from vehicles for construction and maintenance would be minimal and not measurable. Timing restrictions for geotechnical studies would become part of the authorized grant to the applicant. Matt Obradovich, Wildlife Specialist
Noxious Weeds (Executive Order 13112)		Not Affected	No	Weed stipulations would become part of the authorized grant to the applicant negating any effects. Lesley Richman, Weeds Coordinator
Paleontological Resources		Not Present	No	A clearance was completed in September 2008. No concerns were identified. Scott Thomas, Archaeologist
Special Status Species (SSS) Fauna, Wildlife/ Threatened or Endangered (T/E) Species or Habitat	Fish	Not Present	No	No fish-bearing streams would be crossed, nor would any be affected by the proposed route or authorization of the upgrading and use of existing roads. Steve Dowlan, NRS
	Wildlife	**Affected**	**Yes**	**Greater sage-grouse are known to inhabit areas in the project vicinity. Pygmy rabbits are not known to occupy this area. No other SSS wildlife species are known to inhabit this area. Stipulations for timing restrictions for access to met poles and geotechnical studies would become part of the authorized grant to the applicant. Chapter III. Section B.1** **Matt Obradovich, Wildlife Biologist**
SSS-Flora, Plants/T&E Species or Habitat		Not Present	No	BLM issued two Botanical Clearance Waivers (W-08-07 on July 10, 2008 and W-08-16 on September 16, 2008) indicating there are no SSS or T&E Plant Species known to occur at or near proposed met pole locations. Steve Dowlan, NRS
Water Quality (Drinking and Ground)		Not Present	No	No drinking water sources are near the proposed met pole sites, nor are installation of the met poles capable of affecting ground water. Steve Dowlan, NRS

Critical Elements of the Human Environment	Status	Project Contributes to Cumulative Effects	If Not Affected, why? If Affected, Reference Applicable EA Section, Resource Specialist, and Title
Wetlands/Riparian Zones (Executive Order 11990)	Not Present	No	The proposed met pole sites and access routes do not cross riparian areas or influence upland surface runoff such that any riparian area would be affected. Steve Dowlan, NRS
Wild and Scenic Rivers (WSRs)	Not Present	No	No portion of the project area is located within a WSR. Laura Dowlan, Wilderness Specialist
Wilderness/WSA	Not Present	No	No portion of the project area is located within wilderness or a WSA. Laura Dowlan, Wilderness Specialist

Table 2. Summary of Review of Impacts to Noncritical Elements of the Human Environment

Noncritical elements of the Human Environment present	Status (Affected/ Not Affected)	Project contributes to cumulative effects?	If Not Affected, why? If Affected, Reference Applicable EA Section, Resource Specialist, and Title
Soils, Biological Soil Crusts (BSCs), and Vegetation	**Affected**	**No**	**Chapter III: Section C.1** **Steve Dowlan, NRS**
Fire Management	Not Affected	No	Access limitations during periods of extreme fire danger would become part of the authorized grant to the holder. Jeff Rose, Fire Ecologist
Fisheries	Not Present	No	No fish-bearing streams would be crossed, nor would any be affected by the project area or met poles. Steve Dowlan, NRS
Forestry/Woodlands	Not Present	No	There are no forests or woodlands in this area. Jon Reponen, Forester
Grazing Management	Not Affected	No	No effect to livestock grazing because of the small project footprint at the met poles. Placing cattle fencing around anchor points of guy wires would negate any effects to livestock. Dave Ward, Rangeland Management Specialist
Lands and Realty	**Affected**	**No**	**Chapter III: Section C.2** **Holly Orr, Realty Specialist**
Minerals	Not Affected	No	No mining claims or minerals issues. Terri Geisler, Geologist

Noncritical elements of the Human Environment present	Status (Affected/ Not Affected)	Project contributes to cumulative effects?	If Not Affected, why? If Affected, Reference Applicable EA Section, Resource Specialist, and Title
Operations (Range Lead)	Not Affected	No	BLM personnel would not be required to maintain project. William Andersen, District Range Lead
Reclamation	Not Affected	No	There would be no reclamation required by the BLM on this project. ROW grant provides for reclamation by Horizon and inspection by BLM. Todd Curtis, District Engineer
Recreation/Off Highway Vehicles	**Affected**	**No**	**Chapter III: Section C.3** **Laura Dowlan, Wilderness Specialist**
Social and Economic Values	Not Affected	No	There would be no measurable effects to Social and Economic Values associated with implementation of any of the alternatives. Rhonda Karges, Planning and Environmental Coordinator
Visual Resources	**Affected**	**No**	**Chapter III: Section C.4** **Fred McDonald, Supervisory NRS**
Wild Horses and Burros	Not Present	No	The met poles are not in a Herd Management Area or Herd Area. Gary McFadden, Wild Horse and Burro Specialist
Wildlife	Not Affected	No	May be some minor disturbance to wildlife species during installation and/or maintenance of met poles and geotechnical studies. Disturbance would be infrequent and temporary and should be minimal to wildlife. Matt Obradovich, Wildlife Specialist

B. Critical Elements of the Environment

1. Special Status Species - Fauna

Affected Environment

Current discussion and analysis of potential effects to SSS - Fauna are tiered to the AMU/CMPA PRMP/FEIS (August 2004), and relevant information contained in the following sections is incorporated by reference: Sections 3.7.2 and 4.7.2.

The proposed wind energy testing site is located on BLM land in the Burns District of Harney County, Oregon. More specifically, the location is the Pueblo Mountains of Andrews Resource Area. According to Johnson and O'Neil (2001), wildlife habitat types in the area are primarily Shrub-steppe with some Dwarf Shrub-steppe. This habitat type is characterized by an open shrub layer over a moderately open to closed grass layer. This type of habitat is closely associated with approximately 22 bird species and 27 mammal species (Johnson and O'Neil 2001).

Shrub-steppe bird communities are characterized by a relatively small number of breeding species. Of the bird species closely associated with this habitat type, several are so dependent on sage cover that they are termed sagebrush obligates. These include sage sparrow, Brewer's sparrow, sage thrasher, and greater sage-grouse.

The greater sage-grouse is designated a species of concern in Oregon due to long-term declining abundance, distribution, and productivity. As noted above, sage-grouse are a sagebrush obligate species, and alterations of sagebrush habitat are among the primary causes of sage-grouse population declines. Greater sage-grouse have been petitioned for listing under the Federal Endangered Species Act numerous times, and are currently under review.

Sage-grouse breeding begins in mid-March when the males start to congregate on breeding or strutting grounds known as "leks." Females come to the leks to mate, and they generally nest in the vicinity if suitable nesting habitat is available. More than 50 percent of nests are usually located within 4 miles of the lek when suitable nesting habitat exists. However, some studies have shown that female sage-grouse or hens nest as far as 12 miles away from the lek. After hatching its young, a hen keeps her brood in the general vicinity of the nest for one or more weeks. For the first 3 to 4 weeks after hatching, chicks feed primarily on insects, which provide the high protein diet needed for rapid growth. As the season and plant phenology (growth stage) progresses, hens move their broods to higher elevation habitats or to more moist habitats, such as meadows, where higher quality foods are available (BLM 2000).

Forbs (herbaceous plants other than grasses or grass-like plants) are an important food to sage-grouse. As forbs mature and dry out and insect availability declines with the advance of summer, the sage-grouse diet includes more sagebrush leaves and buds. During late fall, sage-grouse feed almost exclusively on sagebrush. They continue to forage on sagebrush throughout the winter until forbs reappear the following spring. Because of their dependence on sagebrush, the condition and distribution of sagebrush habitats are important considerations in habitat suitability for sage-grouse (BLM 2000).

Several leks have been identified and mapped within the project area by the ODFW. There are 13 known leks located in the northern part of the Pueblo Mountains, of which four are within the existing ROW. Nesting habitat was generally available to females near the leks before the Pueblo Fire in 2006, which reduced sagebrush cover in much of the northern section of the existing ROW. Although females still attend the leks for breeding, it is not known at this time where they have moved to nest. Efforts are underway to restore sagebrush habitat in this area of the Pueblo Fire through planting.

Environmental Consequences

No Action Alternative

Under the No Action Alternative, the BLM would not extend the ROW grant for continued use of BLM-administered land for wind energy testing. Existing met poles would be decommissioned and removed. Under current operating conditions, visits to the met poles are infrequent. Data are saved to a memory card in the pole or transmitted via cell phone or satellite signal each day, enabling crews to typically limit visits to the poles once per season. Activities related to removal of the met poles would be more intensive than the seasonal data collection but would be similar to installation. Removal typically takes a day and can be scheduled to avoid breeding seasons.

There would be no cumulative effects from this action once the existing met towers are removed.

Proposed Action

The BLM would authorize continued use of existing met poles and installation of two new poles. The presence of humans and structures could have an impact on breeding activity or behaviors in sage-grouse populations. There are currently no known scientific studies documenting interaction between greater sage-grouse and met poles but observational studies of sage-grouse and lesser prairie chickens show avoidance of structures such as power lines and buildings in otherwise suitable habitat (Hagen 2003, Hagen 2005). The presence of the vertical structure above suitable habitat whether it provides a predator perch or not appears to be a factor is use of that habitat. Hagen et al. (2004) recommended that wind turbines and other tall structures be constructed at least a 1.25 miles from known or potentially occupied lesser prairie chicken habitat.

In 2007, the BLM issued an IM (OR-2008-014) providing additional guidance to the ROD for the Implementation of a Wind Energy Development Program issued in 2005. The IM addresses ROW applications for wind energy projects on public lands located in sage-grouse habitats and administered by the BLM. The IM specifically addresses the BMPs for site monitoring and testing relating to installation of met poles. It states: "The location of MET towers shall be avoided within two miles of an active lek or known seasonal concentration area." The IM also requires that, if guy wires are necessary, all wires have permanent markers (bird flight diverters) attached for their entire length to increase visibility.

The proposed new met poles would comply with BLM policy related to the greater sage-grouse as stated in IM OR-2008-014. They would be sited a minimum of 2 miles from known lek sites identified and mapped by ODFW. In addition, the guy wires on new met poles would have bird flight diverters on the entire length of the guy wires to improve their visibility for wildlife. Existing met poles (Horizon Wind Pueblo 1 and 2) currently have yellow flagging; the flagging would be replaced with bird flight diverters only if the poles are taken down for maintenance.

Cumulative effects of this action would be minimal compared to the loss of habitat in the Pueblo Fire of 2006. Restoration of sagebrush cover through planting could allow for sage-grouse nesting again. Reasonably foreseeable actions, including wind farm development, might preclude sage-grouse use of this area. Although not scientifically proven, sage-grouse usually avoid areas with structures higher than sagebrush, such as juniper woodlands and power lines, because they may provide raptor perches. Structures such as wind turbines may have the same affect although designed to preclude perching birds. It is not known at present whether sage-grouse may eventually become used to the presence of wind turbines.

Extension-only Alternative

The BLM would authorize continued use of existing met poles, but would not authorize the installation of new met poles. The existing poles were installed under BLM ROW grant OR-63580 in 2006. Under this alternative, there would be no change from current conditions and therefore no new effects on greater sage-grouse. The two existing met poles (authorized prior to IM-OR-2008-024) are within 2 miles of lek sites. Activities related to removal of the met poles would be more intensive than the seasonal data collection but would be similar to installation. Potential impacts would be mitigated by stipulations limiting data collection and maintenance visits to nonbreeding seasons with daily time restrictions during the breeding season. Access to met poles between March 1 and May 31 each year would be limited to times after 10 a.m. Geotechnical studies would also have seasonal restrictions to avoid disturbance during breeding and nesting periods.

Cumulative effects of this action would be similar to that of the proposed action except that only the two existing met towers would be authorized instead of four. The potential for wind farm development would still be a reasonably foreseeable action that might preclude sage-grouse use of the area.

C. Noncritical Elements of the Environment

1. Soils, Biological Soil Crusts, and Vegetation

Affected Environment

Current discussion and analysis of potential effects to Soils, Biological Soil Crusts, and Vegetation are tiered to the AMU/CMPA PRMP/FEIS (August 2004), and relevant information contained in the following sections is incorporated by reference: Sections 3.4, 3.5.4, 4.4 and 4.5.5.

The access route to Pueblo 3 is over Baconcamp-Clamp-Rock outcrop (moderate potential for erosion from water, low potential for erosion from wind) and Felcher-Skedaddle (low potential for erosion from wind or water) general soils types. The Pueblo 3 MET Pole is on Felcher-Skedaddle soil. Access to Pueblo 4 is over Ninemile-Westbutte-Carryback (moderate to high potential for erosion from water, low potential for erosion from wind) and Felcher-Skedaddle general soils types. The Pueblo 4 MET Pole is on Ninemile-Westbutte-Carryback soil. Average precipitation ranges from 16 to 20 inches annually.

The proposed new met pole sites would be accessed via existing roads followed by off-road access. Access to geotechnical study sites would also use existing roads to the extent feasible, and off-road access routes. Adjacent surface vegetation generally includes mountain big sagebrush, low sagebrush, Idaho fescue, and needlegrass species.

BSCs are highly specialized organisms that occupy nutrient-poor zones between vegetation clumps in many types of upland arid land vegetation communities, and function as living mulch by retaining soil moisture, discouraging annual weed growth, reducing wind and water erosion, fixing atmospheric nitrogen, and contributing organic material to soil fertility. The BSCs include such organisms as mosses, lichens, green algae, micro fungi, and cyan bacteria. Presence and general health of BSCs is reflected in a site's soil surface stability and biological productivity, which in turn is a reflection of BSC contribution to ecological processes that support these elements. In plant communities such as the ROW area, cover by vascular plants and rocks limits interspaces where BSCs can develop.

Environmental Consequences

No Action Alternative

Under the No Action Alternative, the current ROW grant would expire and the existing met poles would be removed. Soils would only be affected by two vehicle trips to the pole sites for removal. No new soil compaction would occur. Vegetation trends and soil surface stability conditions would continue on the current trajectory under infrequent use, with some vegetation regrowth and decompaction occurring where the poles were removed.

Proposed Action

Under the Proposed Action, the BLM would renew an existing ROW grant that would allow installation of two new met poles. The poles sit on a 3-foot by 3-foot base. Soils under each (18 square feet total) would be compacted in order to establish a flat surface. Approximately 4 miles of off-road access to the poles would be required and could result in minimal compaction from the infrequent vehicle trips.

Use of a pickup or full-size vehicle only when soils are dry or frozen would reduce or eliminate entirely the potential to develop trenches in wheel tracks from vehicle passage. Use of light (less than 1,000 pounds) ATVs with low tire pressure (less than 10 psi) when soils are damp would reduce any further likelihood of soil trenching from vehicle use. Infrequent use (no more than four times per year) of access routes would permit any compacted or otherwise damaged BSCs to recover after the project is completed and met poles are removed.

The ROW grant would also allow for additional data collection activities, including geotechnical studies, during the 3-year extension. The applicant would contract with a geotechnical consultant to perform subsurface explorations within the project site. It is anticipated that the geotechnical consultant would take sample borings at approximately 225 locations. Each boring hold has a diameter of approximately six inches and a surface area of approximately 28 square inches. The total estimated ground disturbance resulting from the 225 test bores would be approximately 50 square feet.

Use of the truck-mounted drill rig to access the boring locations would result in some soil compaction of the routes. Where possible, the drilling contractor would use previously established roads and routes. Test bore sites would only be accessed once. Access would be limited to times when soils are dry or frozen.

Existing access roads are already hardened and vegetation has been removed or reduced in cover. For boring locations away from existing access roads, an ATV would be used to access the site one time, thus minimizing soil disturbance.

Therefore, soil surface character with respect to infiltration and runoff would not change measurably. To the extent that the BLM and the permittee address drainage problem areas that may develop, excessive soil erosion is unlikely to occur at any of the met pole sites or along the access routes, or contribute cumulatively to loss of soil surface stability or BSCs in the ROW areas.

Potential impacts to the soils and vegetation would be mitigated through stipulations 9, 10, 11, 12, 13, 14, 15, 20, and 21 listed in Chapter II: Section 2.2.

Extension-only Alternative

Under the Extension-only Alternative, the current ROW grant would be extended for the continued operation of the existing met poles. No new met poles would be installed.

Operations would not change from current conditions and, therefore, vegetation trends and soil surface stability conditions would continue on the current trajectory under infrequent use.

2. Lands and Realty

Affected Environment

Current discussion and analysis of potential effects to Lands and Realty are tiered to the AMU/CMPA PRMP/FEIS (August 2004), and relevant information contained in the following sections is incorporated by reference: Sections 3.17.5 and 4.17.

There are no valid rights that currently exist at or near the proposed met pole locations. There are no other conflicting ROWs in the area. The applicant and the general public can access the area under casual use as conditions allow.

Environmental Consequences

No Action Alternative

The existing ROW would not be renewed, the amended application would be rejected, and wind energy testing would end. The corresponding acreage would no longer be held in exclusive reservation.

Proposed Action

The BLM would issue the ROW grant, allowing installation of two new met poles and continued use of the existing met poles resulting in an exclusive use area for wind testing and monitoring. Increased use of the area for installation and maintenance would include one visit by pickup truck or ATV for each new met pole, and approximately one visit per season for monitoring, data collection, and maintenance. Access for geotechnical studies would include access by a truck-mounted drilling rig to approximately 225 test boring sites. Routes to the test boring sites would only be used once, and would not establish new access routes in the project area.

Extension-only Alternative

Under the Extension-only Alternative, the current ROW grant would be extended for continued operation of existing met poles. No new met poles would be installed. Operations would not change from current conditions. These conditions include site visits approximately once per season for monitoring, data collection, and maintenance.

3. Recreation/Off-Highway Vehicles

Affected Environment

Current discussion and analysis of potential effects to Recreation/Off-Highway Vehicles Resources are tiered to the AMU/CMPA PRMP/FEIS (August 2004), and relevant information contained in the following sections is incorporated by reference: Sections 3.19-3.20 and 4.19-4.20.

The recreation setting in the project area consists of a mix of rolling hills and a ridgeline running from north to south with elevations as high as approximately 6,000 to 6,500 feet with grasses and sagebrush being the dominant vegetation. Developments observable as part of the recreation setting consist primarily of roads, fencing, water developments (e.g., reservoirs and wells), and two existing wind monitoring towers. Generally these developments are distributed throughout the project area and do not dominate the recreation setting.

The project area offers opportunities for hunting, hiking, horseback riding, wildlife viewing, photography, and camping. Hunting and camping associated with hunting are likely the most common recreational activities. Though specific use data is not available for the project area, use appears to be relatively low given the lack of use indicators (e.g., dispersed campsites and litter) with most of the use occurring in the late summer and fall during the hunting season.

Environmental Consequences

No Action Alternative

Under this alternative the existing met poles would be removed. No other changes to the landscape character would be expected.

Proposed Action

No changes to the types of recreational opportunities available in the project area are expected from implementing the proposed action. No restrictions to public access would occur during construction or maintenance of additional monitoring towers. No new roads would be constructed as part of the proposed action, so no changes to public motorized access are expected. Noise and traffic disturbance to recreational activities would be limited to days while the towers are being installed and other monitoring and data gathering activities are taking place. Use of roads and off-road use related to the maintenance of the towers is expected to be low given that only two to four trips per year are expected for the monitoring and maintenance of the towers. While the existing and proposed towers would be observable as developments in the recreation setting, they are not expected to dominate the recreation setting. The existing and proposed towers are also temporary in nature and would only be authorized until a decision is made (3 years) on a separate and distinct ROW application and POD for commercial wind energy development. The proposed action would result in very little soil or vegetation disturbance (EA Chapter III, Section C.1). Once removed, very little if any evidence of the towers would be expected to be observable to the general public within 1 to 2 years. There are no other known reasonably foreseeable future actions that would contribute to effects to recreation resources under this project.

Extension-only Alternative

The existing towers would continue to be observable as developments in the recreation setting. Use of roads related to the maintenance of the towers is expected to be low given that only two to four trips per year are expected for the monitoring and maintenance of the towers. The existing towers are also temporary in nature and would only be authorized until a decision is made (3 years) on a separate and distinct ROW application and POD for commercial wind energy development. Once removed, very little if any evidence of the towers would be expected to be observable to the general public within 1 to 2 years. There are no other known reasonably foreseeable future actions that would contribute to effects to recreation resources under this project.

4. Visual Resources

Affected Environment

Current discussion and analysis of potential effects to Visual Resources are tiered to the AMU/CMPA PRMP/FEIS (August 2004), and relevant information contained in the following sections is incorporated by reference: Sections 3.11 and 4.11.

The BLM has developed a Visual Resource Management (VRM) system to manage the scenic values of the public lands it administers. The VRM system identifies four levels, or "classes," of scenic values that require different levels of management. For example, management of an area with high scenic value might be focused on preserving the existing character of the landscape, and management of an area with little scenic value might allow for major modifications to the landscape. Under the AMU RMP (BLM 2005), the proposed wind energy site testing and monitoring project area falls within a VRM Class IV category. The VRM objectives for BLM-administered lands within the Class IV category provide for management activities which require major modification of the existing character of the landscape. The level of change to the characteristic landscape can be high.

Environmental Consequences

No Action Alternative

Under this alternative the existing met poles would be removed. No other changes to the landscape character would be expected.

Proposed Action

Under this alternative, existing met poles would continue to operate and two new met poles would be installed. Very little change to the land/water component of the landscape character would occur, since major construction or excavation would not occur. The 6 to 8-inch diameter met pole (Horizon Wind Pueblo 3) could be observable from the Domingo Pass Road. It is anticipated at this time that Horizon Wind Pueblo 4 could be observable from Williams Creek Road, which is on private property. Because of the narrow diameter of the poles, the public would have difficulty seeing them from a distance. However, the existing character of the landscape would be retained in the general area as a whole and Class IV objectives would be met. There are no other known reasonably foreseeable future actions that would contribute to effects to visual resources under this project. A separate and distinct ROW application and POD for commercial wind energy development would be analyzed by the BLM at a later date.

Extension-only Alternative

No changes to the landscape character compared to existing conditions would be expected under this alternative. There are no other known reasonably foreseeable future actions that would contribute to effects to visual resources under this project. A separate and distinct ROW application and POD for commercial wind energy development will be analyzed by the BLM at a later date.

D. Discussion on Cumulative Effects

The Council on Environmental Quality (CEQ), in guidance issued on June 24, 2005, notes that the "environmental analysis required under NEPA is forward-looking," and review of past actions is required only "to the extent that this review informs agency decision-making regarding the Proposed Action." Use of information on the effects on past actions may be useful in two ways, according to the CEQ guidance: for consideration of the Proposed Action's cumulative effects, and as a basis for identifying the Proposed Action's effects.

The CEQ states in this guidance that "[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 inherently includes the effects of past actions. The CEQ guidance specifies that the "CEQ regulations do not require the consideration of the individual effects of all past actions to determine the present effects of past actions." Our information on current environmental conditions is more comprehensive and more accurate for establishing a useful starting point for a cumulative effects analysis than attempting to establish such a starting point by adding up the described effects of individual past actions to some environmental baseline condition in the past that, unlike current conditions, can no longer be verified by direct examination. The second area in which the CEQ guidance states that information on past actions may be useful is in "illuminating or predicting the direct and indirect effects of a Proposed Action." The usefulness of such information is limited by the fact that it is anecdotal only, and extrapolation of data from such singular experiences is not generally accepted as a reliable predictor of effects.

However, "experience with and information about past direct and indirect effects of individual past actions" have been found useful in "illuminating or predicting the direct and indirect effects" of the Proposed Action in the following instances: the basis for predicting the effects of the Proposed Action and its alternatives is based on the general accumulated experience of the resource professionals in the agency with similar actions.

Known past authorized actions in the project vicinity include authorization for grazing and grants of mining claims. In addition a wildland fire occurred in 2006. Other potential past and present uses in the vicinity include recreational uses such as camping and hunting. Recreational uses are limited because of lack of roads and seasonal restrictions.

Likely future actions would include the continuation of the noted authorized past actions as well as continued use, operation, and maintenance of the existing met poles. If granted, the proposed ROW would authorize two new met poles, 4.5 miles of new access routes, geotechnical studies, and seasonal visits by pickup to the large and lightly used area. If mitigated in accordance with applicable laws and policies, it is unlikely the Proposed Action, along with known past, present, and reasonable foreseeable future actions, would contribute to a significant cumulative increase in use or resource depletion.

CHAPTER IV: CONSULTATION AND COORDINATION

A. List of Preparers

See Table of Critical and Noncritical Elements Chapter III (A)

ESA Adolfson
5309 Shilshole Avenue NW
Seattle, WA 98107

B. Persons, Groups, or Agencies Consulted

None.

CHAPTER V: REFERENCES

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APPENDIX A

Map of the ROW Met Pole Locations and Access Roads (Exhibit A)

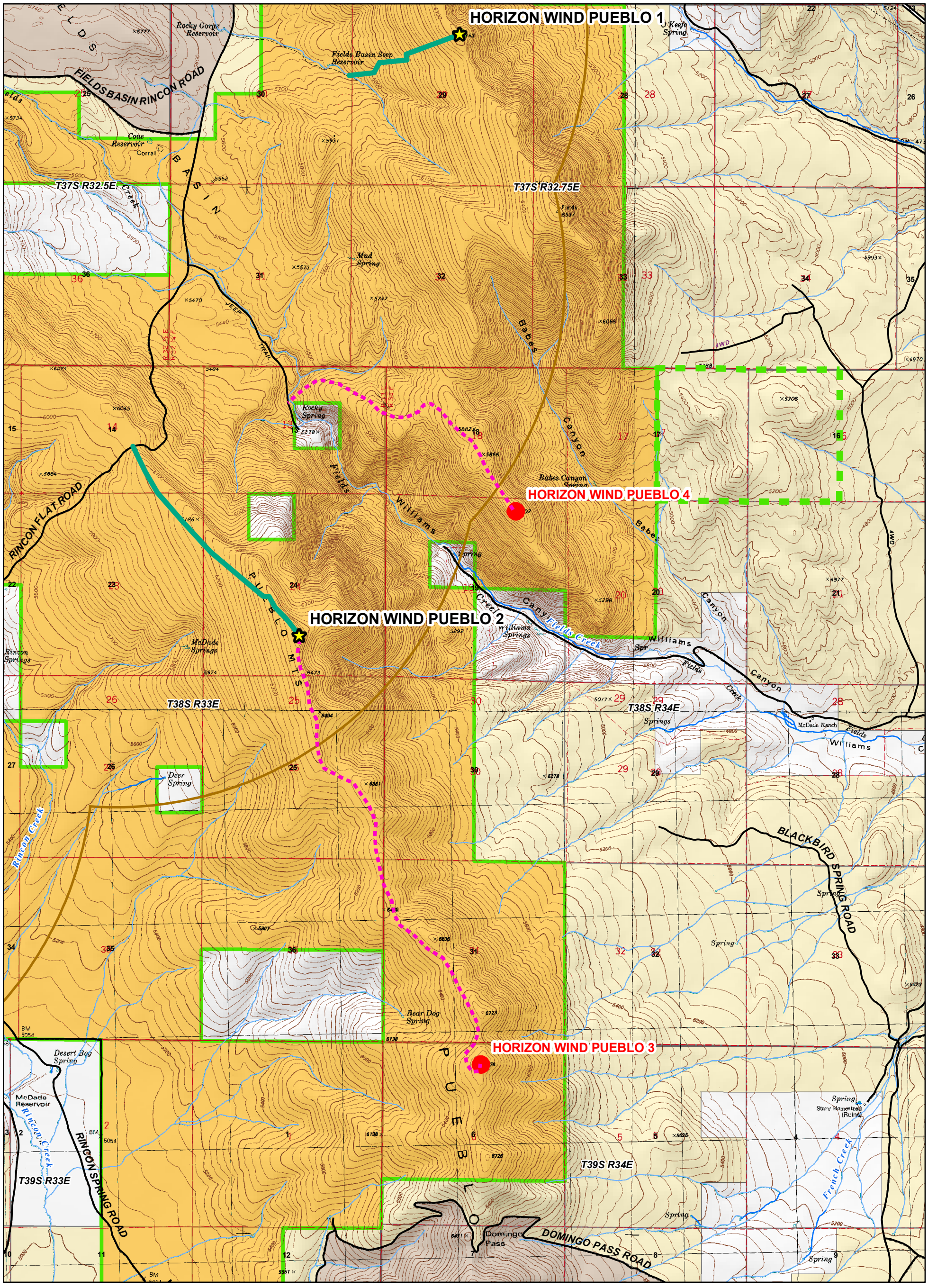

Exhibit A, OR-63580 Horizon Wind Energy NW X LLC
Pueblo Mtn Wind Energy Site Testing and Monitoring Project Area

- 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

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September 18. 2008 For Holly Orr By Kelly Hazen