Bureau of Land Management Ely District Office Attn: Wells McGiffert HC33, Box 33500 Ely, NV 8931 January 15, 2010

Via e-mail: springvalley@blm.gov

Re: Draft Environmental Assessment for the Proposed Spring Valley Wind Project

Dear Mr. McGiffert:

Please accept these comments regarding the above project on behalf of the Center for Biological Diversity ("Center"). The Center is a non-profit, public interest environmental organization dedicated to the protection of native species and their habitats through science, policy, and environmental law. The Center has over 255,000 members and on-line activists throughout Nevada and the United States. Our members frequently use the public lands of Nevada for recreational and scientific pursuits and are deeply concerned about the protection of the species found there and their habitats.

The Center has serious concerns regarding this project. We offer the following comments upon our review of the Environmental Assessment ("EA")

1. The BLM should have prepared an Environmental Impact Statement rather than an Environmental Assessment.

The Ninth Circuit has repeatedly held, an EIS must be prepared if the EA shows that the proposed project may cause significant impacts to the environment. 40 C.F.R. §§ 1501.3, 1501.4; see, e.g., Ocean Advocates v. United States Army Corps of Eng'rs, 361 F.3d 1108 (9th Cir. 2004); Metcalf v. Daley, 214 F.3d 1135, 1142 (9th Cir. 2000); Blue Mountains Biodiversity Project v. Blackwood, 161 F.3d 1208, 1212 (9th Cir. 1998). NEPA requires the BLM to prepare an environmental impact statement if "substantial questions are raised as to whether a project . . . may cause significant degradation of some human environmental factor.' To trigger this requirement a 'plaintiff need not show that significant effects will in fact occur,' raising 'substantial questions whether a project may have a significant effect' is sufficient." Idaho Sporting Cong. v. Thomas, 137 F.3d 1146, 1149-50 (9th Cir. 1998)(internal citations omitted); see also 42 U.S.C. § 4332(2)(C). While any mention of an adverse impact does not necessarily compel an EIS,

but an agency should not use a "soft touch or brush-off of negative effects." <u>Native Ecosystems Council v. USFS</u>, 428 F.3d 1233, 1240-41 (9th Cir. 2005)

Where impacts to imperiled species are at issue, the agency must carefully consider all potential adverse effects. As the Ninth Circuit put it:"[a]Ithough the presence of some negative effects does not mandate a finding of significant impact, the agency must 'consider the degree of adverse effect on a species.'" Alaska Wilderness League v. Kempthorne, 548 F.3d 815, 826 (9th Cir. 2008) (finding the agency failed to take a hard look at impacts to whales in an EA tiered to a programmatic EIS). See also Native Ecosystems Council, 428 F.3d at 1250 (finding agency analysis insufficient where record failed to describe the type or amount of habitat necessary to sustain the viability of the species).

Here, it appears that BLM failed to consider many of the relevant factors because it incorrectly concluded that the proposed wind energy development would not have significant impacts on the environment.

The Council on Environmental Quality's ("CEQ") regulations implementing NEPA make clear that federal agencies can avoid preparing an EIS only if the federal action will have "no significant impact" on the environment. 40 C.F.R. § 1501.4(e). Caselaw interpreting the regulations indicates that the agency should make this finding confidently and with certainty that no "substantial questions" exist as to whether or not "a project may have a significant effect." *See LaFlamme v. Fed. Energy Regulatory Comm'n*, 852 F.2d 389, 397 (9th Cir. 1988).Because the proposed race may in fact have significant impacts, the BLM is required to prepare a full EIS.

As the Ninth Circuit has observed, "No matter how thorough, an EA can never substitute for preparation of an EIS, if the proposed action could significantly affect the environment." <u>Anderson v. Evans</u>, 314 F.3d 1006, 1023 (9th Cir. 2002). The Ninth Circuit further explained:

We stress in this regard that an EIS serves different purposes from an EA. An EA simply assesses whether there will be a significant impact on the environment. An EIS weighs any significant negative impacts of the proposed action against the positive objectives of the project.

Preparation of an EIS thus ensures that decision-makers know that there is a risk of significant environmental impact and take that impact into consideration. As such, an EIS is more likely to attract the time and attention of both policymakers and the public.

<u>Id</u>. <u>See also Sierra Club v. Marsh</u>, 769 F.2d 868, 874–76 (1st Cir. 1985) (holding that "under NEPA and its implementing regulations, we cannot accept [] EAs as a substitute

for an EIS—despite the time, effort, and analysis that went into their production—because an EA and an EIS serve very different purposes"); 46 Fed. Reg. 18,026, 18,037 (1981) (CEQ statement advising agencies to keep EAs to not more than about 10–15 pages and stating that "[i]n most cases . . . a lengthy EA indicates that an EIS is needed").

In this case there are substantial questions as to whether the proposed wind energy development would significantly impact the natural and human environment, including via impacts to wildlife, habitat, springs and visual resources. Before reaching any conclusion that the impacts will not be significant, the BLM must put its action into context and evaluate the intensity of the action and likely environmental effects.

Whether a project is significant depends on both the project's context and its intensity. 40 C.F.R. § 1508.27.

"Significantly" as used in NEPA requires considerations of both context and intensity:

- (a) Context. This means that the significance of an action must be analyzed in several contexts such as society as a whole (human, national), the affected region, the affected interests, and the locality. . . . Both shortand long-term effects are relevant.
- (b) Intensity. This refers to the severity of impact. Responsible officials must bear in mind that more than one agency may make decisions about partial aspects of a major action. The following should be considered in evaluating intensity:
 - (1) Impacts that may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that on balance the effect will be beneficial.
 - (2) The degree to which the proposed action affects public health or 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.
 - (4) The degree to which the effects on the quality of the human environment are likely to be highly controversial.
 - (5) The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.
 - (6) The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.

- (7) Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts.
- (8) The 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 or may cause loss or destruction of significant scientific, cultural, or historical resources.
- (9) The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.
- (10) Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.

40 C.F.R. § 1508.27 (b)(1)-(10). See, e.g., National Parks & Conservation Association v. Babbitt, 241 F.3d 722, 731 (9th Cir. 2001) (either of two significance factors considered by the court "may be sufficient to require preparation of an EIS in appropriate circumstances"); Ocean Advocates, 402 F.3d at 865.

In this instance, both the context and intensity of the proposed decision show that an EIS should have been prepared for the entire project. Given the scope and intensity of the likely impacts, we believe, the BLM would be hard pressed to make a "convincing statement of reasons" that the impacts of the proposed wind development are insignificant, Blue Mtns., 161 F.3d at 1212.

A. Intensity

The "substantial questions" raised by the types of impacts likely to be associated with the proposed development certainly implicate many of the NEPA regulations' "intensity" factors, including those relating to "unique characteristics" of the project area. Although currently there are no species listed under the Endangered Species Act ("ESA") at least two species, the greater sage grouse and the pygmy rabbit, are actively being review for inclusion under the ESA. The sage grouse utilize the project area for courtship, breeding and rearing of their young and for winter habitat, and pygmy rabbits, extreme habitat specialists, occupy the site, 2 making the area significant and unique. A large and significant migratory roosting cave, that shelters over a million Brazilian free-tailed bats, lies immediately adjacent to the project area³ and is another unique characteristic. At least three plant species ranked by the Nevada Heritage

See Section 2 of this letter. See Section 6 of this letter.

See Section 3 of this letter.

program as critically imperiled due to extreme rarity or imminent threats are documented to have been found within two miles of the project site and have potential to be found within the site.⁴ The site borders crucial pronghorn antelope winter range, and big horn sheep inhabiting the mountain ranges immediately to the east and west of the project drop into the project site area during the winter.

The nature of the decision warrants and the public deserves an opportunity for full public participation in the NEPA process through the preparation of an environmental impact statement.

B. Significant controversy surrounds the proposed project.

There is significant controversy between the Nevada Department of Wildlife ("NDOW") and the BLM over what management practices are sufficient to provide protections for the sage grouse. Management Action SS-40 from the Ely Proposed Resource Management Plan/Final Environmental Impact Statement, which, in part, requires a 0.25 mile buffer zone from above ground development outside of designated corridors.⁵

The Center is in receipt of two letters from the NDOW to the Nevada BLM expressing strong concerns that their recommendations for the wording of Management Action SS-40 were ignored or disregarded in the final wording. In a June 24 letter, NDOW stated that as written, SS-40, "will not adequately protect sage-grouse habitat to the extent necessary to maintain sage-grouse distribution and abundance"; this letter went on to question the BLM's compliance with its internal direction and policies concerning sensitive species. In a followup letter, NDOW stated that they are, "disheartened by Ms. Thomas's letter of response which quickly dismisses scientific study in favor of the decisional flexibility for your agency". This same letter reiterated, "There is a strong need to provide protection for dwindling populations of sage-grouse. It is our opinion that the ¼ mile buffer zone (that may protect the lek site but not nesting, brood-rearing or winter habitat) which the Ely District is employing is inadequate to provide ample protection from energy facilities, transmission lines or mines that would degrade available habitat."

The public has not been adequately informed by the BLM of the potential impacts from this project due to the nature of the EA process as opposed to an EIS process. It appears that the BLM is reticent to provide adequate information to the public on the environmental impacts of the proposed project and compliance with BLM's duties

⁵ BLM. 2007. Ely Proposed Resource Management Plan/Final Environmental Impact Statement. Ely Field Office, NV. Page 2.4-26.

⁴ See Section 5 of this letter.

⁶ Letter dated June 24, 2009 from Steve Force, Eastern Region Habitat Supervisor to Mr. Michael herder, Acting Ely District Manager. See Appendix A.

⁷ Letter dated September 1, 2009 from Kenneth Mayer, NDOW Director to Mr. Ron Wenker, BLM Nevada State Director. See Appendix B.

pursuant to FLPMA and the internal direction, such as BLM Manual 6840-2, to protect the resources of these public lands.

2. The provisions of the EA are inadequate to protect the sage grouse.

The greater sage grouse is a species that is currently being evaluated by the U.S. Fish and Wildlife Service ("FWS") range-wide to determine if protection under the ESA is required for the survival of the species. Several petitions and lawsuits have been filed that allege such protection is needed and provide a wealth of data to support their belief. Nevada Governor Jim Gibbons established a state policy in September 2008, "...to preserve and protect sage-grouse habitat whenever possible", in light of the bird's importance to the citizens of the state and the magnitude of human and natural disturbances to sage grouse habitat.⁸

The sage grouse is a species that has been identified by the BLM Nevada State Office as sensitive under BLM Manual 6840.2. This direction establishes that, "...the BLM shall designate Bureau sensitive species and implement measures to conserve these species and their habitats, including ESA proposed critical habitat, to promote their conservation and reduce the likelihood and need for such species to be listed pursuant to the ESA."

Section 6840.2 C. on implementation of this direction provides:

"On BLM-administered lands, the BLM shall manage Bureau sensitive species and their habitats to minimize or eliminate threats affecting the status of the species or to improve the condition of the species habitat, by:

- 2. Ensuring that BLM activities affecting Bureau sensitive species are carried out in a way that is consistent with its objectives for managing those species and their habitats at the appropriate spatial scale.
- 4. Working with partners and stakeholders to develop species-specific or ecosystem-based conservation strategies.
- 7. Considering ecosystem management and the conservation of native biodiversity to reduce the likelihood that any native species will require Bureau sensitive species status.
- 8. I the absence of conservation strategies, incorporate best management practices, standard operating procedures, conservation measures, and design criteria to mitigate specific threats to Bureau sensitive species during the planning of activities and projects."

Sage grouse, as the name implies, is closely allied and dependent on various stages of sage brush development for their life stages and survival. Grouse are found in different stages of sagebrush development depending upon the season and the needs of the

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⁸ See: http://gov.state.nv.us/PressReleases/2008/PDF/2008-10-29-SageGrouseEO.pdf .

grouse during that time. Despite the well-known importance of this habitat to sage grouse and other sagebrush obligates, the quality and quantity of sagebrush habitats have declined for at least the last 50 years and the welfare of the grouse mirrors this trend. The proposal would destroy or degrade about 3643 acres of habitat. 2

Sage grouse have a strong fidelity to their display, breeding, summering and wintering areas. Male grouse typically travel up to 1.3 miles to their lek sites, while during the breeding season, females typically travel less than 3 miles, but up to 22 miles to nest. Sage grouse exhibit both migratory and non-migratory behaviors, and populations of the grouse can contain both behaviors. Non-migratory grouse usually do not travel more than 6 miles annually, although migratory birds typically travel 21 miles annually, but travels up to 100 miles have been documented. 13

The proposed action alternative produces impacts within 4 miles of at least 4 leks - Cleve Creek, Bastian Creek, Osceola, and Big Negro Creek, South, all within the distance required by the grouse to complete its yearly cycle of activities. Impacts to sage grouse related to energy development and transmission include lek abandonment, reduced nesting area fidelity and reproductive success, and abandonment of previously used winter habitat.¹⁴

The EA proposes to protect the sage grouse and their habitats through "Design Criteria (Mitigation Measures)" that include:

- "Where appropriate, permitted activities would be restricted from March 1 through May 15 within 2 miles of an active greater sage-grouse lek."
- Where appropriate, permitted activities would be restricted from November 1 through May 15 within greater sage-grouse winter range. If activities must occur during that time, a survey would occur prior to work to determine whether greater sage-grouse are present. If individuals are not present, work may commence; if individuals are present, the BLM would determine necessary action such as restricted work areas until sage grouse have left the project area."15

⁹ Doherty, Kevin E., David E. Naugle, Brett L. Walker, and Jon M. Graham. 2008. Greater sage-grouse winter habitat selection and energy development. J. of Wildlife Management 72(1):187-195.

¹⁰ Connelly, John W., Michael A. Schroeder, Alan R. Sands, and Clait E. Braun. 2000. Guidelines to manage sage grouse populations and their habitats. Wildlife Soc. Bull. 28(4):967-985.

¹¹ Becker, JM, CA Duberstein, JD Tagestad, and JL Downs. 2009. Sage-grouse and wind energy: biology, habits and potential effects of development. Pacific Northwest National Laboratory, operated by Battelle, for the U.S. Department of Energy. Contract DE-AC05-76RL01830.

¹² EA, page 35.

¹³ Becker et al, 2009.

¹⁴ Becker et al. 2009.

¹⁵ EA, page 20.

Since there is a lack of experiential and research data associated specifically for power lines and renewable energy developments and sage grouse, to gain a sense of the "best management practice", one must look to programmatic recommendations and the existing data for similar developments.

In 2003, the FWS developed interim guidelines for avoiding and minimizing impacts to wildlife from wind turbines. ¹⁶ In these guidelines, the FWS offer the following recommendations for locating "wind turbines and associated structures" within wind resource areas selected for development of wind energy facilities:

- Avoid fragmenting large, contiguous areas of habitat for area-sensitive species such as sage grouse;
- place developments on previously disturbed lands and away from areas of intact and healthy native habitats;
- avoid placing turbines within 5 miles of known leks;
- minimize roads, fences, and other infrastructure;
- avoid structures and designs that attract raptors; and,
- where feasible, place electric power lines underground.

In 2005, the BLM issued a programmatic EIS ("PEIS") for wind energy development in the west.¹⁷ This document contained a summarization of the best practices to protect Gallinaceous birds such as sage grouse during wind development planning and implementation. The measures, generic by nature included:

- control of invasive species;
- use of anti-perching raptor deterrents;
- restriction of OHV activity;
- avoidance of placing facilities in or next to sensitive habitats such as leks and wintering habitat;
- management of noise to prevent grouse disturbance;
- using a landscape approach to managing development impacts on sage grouse, such as identifying and avoiding daily and seasonal movement and migration routes; minimizing fragmentation and disturbance; restoration of habitat and compensatory habitat restoration for impacted sagebrush habitat.¹⁸

Connelly et al recommended that for non-migratory grouse occupying habitats that are distributed uniformly and are generally well distributed around the lek, that a 2-mile no disturbance area would be adequate based on the present science. For non-migratory grouse occupying not uniformly distributed sagebrush habitats, a 3.1 mile non-disturbance buffer was in order. They also made note that migratory birds can move

¹⁶ See: http://www.fws.gov/habitatconservation/wind.pdf.

¹⁷ BLM. 2005. Final Programmatic Environmental Impact Statement on Wind energy Development on BLM-Administered Lands in the Western United States. FES 05-11. Available at: http://windeis.anl.gov/news/index.cfm
¹⁸ Ibid, pages 5-73-74.

further than 11 miles between leks and nesting habitat, and that breeding habitats within 11 miles of a lek should be identified and protected. 19

Another study on impacts to sage grouse from coal-bed natural gas development in Montana and Wyoming concluded that any development within .25 miles of a lek posed a severe threat to the lek's persistence, and may result in impacts over much larger areas. It further found that timing restrictions on construction and drilling during the breeding season do not prevent the impacts of associated infrastructure, such as avoidance, collisions, and predation during other times of the year that may be crucial for population persistence. Based on modeling conducted in this study, the authors estimated that development within 2 miles of a lek would reduce the average probability of lek persistence from 87% to 5%. ²⁰

Draft recommendations on energy and infrastructure development from the Nevada Governor's Sage-Grouse Conservation Team, dated July 2009, state that sage grouse habitat categories 1 and 2 (leks, brood rearing and winter habitats) are irreplaceable and critical to the long term persistence of the grouse and that no wind or geothermal development be developed, under any circumstance in these habitats. It further states that where habitat categories have not been determined, wind turbines or geothermal facilities should not be sited within 3 miles of the nearest lek; and that transmission lines should not be sited within 3 miles of the nearest active lek, and that ground level structures such as roads, should not be sited within .5 miles of the nearest lek site.²¹

Based on the cited literature and agency direction and other literature cited in them, it is apparent that the proposed mitigation measures for sage grouse in the EA are inadequate from both a spatial and temporal perspective, particularly given the magnitude of the risk that the sage grouse will be listed under the ESA. Particularly lacking is any attempt by the BLM or proponent to analyze and disclose the impacts of the project on the sage grouse from a landscape perspective. According to NDOW habitat maps, the entire project area is in sage grouse wintering and rearing habitat and much is in nesting habitat. This immediately raises concerns given the above cited section of the PEIS and the FWS 2003 interim guidelines on wind and sage grouse. The analysis emphasis of distance from the single lek at Bastian Creek seems to have created a blind spot for the BLM in its analysis of project impacts on sage grouse. Also lacking was a discussion of how off-road vehicles would be restricted. Further, while the EA addresses invasive plant management, it envisioned the use of herbicides, which is counter to the guidelines in the PEIS. Before issuing a final decision, the BLM must correct this deficiency.

¹⁹ Connelly et al, 2000.

²⁰ Walker, Brett L., David E. Naugle, and Kevin E. Doherty. 2007. Greater sage-grouse population response to energy development and habitat loss. J. of Wildlife Management, 71(8):2644-2654. ²¹ Personal communications with NDOW.

3. The EA inadequately considers the impacts to bats, particularly the Brazilian (Mexican) free-tailed bat.

The BLM, through pre-construction surveys, has identified twelve species of bats that utilize the project area at least part of the year. By checking the information for bat mortalities at other wind energy facilities in the west, the BLM found that six of the species present have suffered deaths at similar facilities, including two of the most common species – the Brazilian free-tailed (alternatively referred to as the "Mexican free-tailed bat") and little brown bats. ²² All of the bats found in the project area are special status species as designated by the Nevada State Director. ²³

Of particular concern is the Mexican free-tailed bat due to a large migratory roost for this species, Rose Guano Cave, located approximately 2 miles east of the project area. ²⁴ An unpublished study by Richard Sherwin found that the cave is a mixed sex, migratory flow-through site, active from June through September, with the peak of use being midlate August. ²⁵ This study found that at any point in time during this period, there were tens of thousands of bats utilizing the cave, and that over a million bats used it over the course of the fall migration. Sherwin found that the greatest number of bats on any given evening left the cave and proceeded south towards agricultural fields 8-20 miles away. However, he also found that smaller numbers headed west and north out of the cave into the portion of Spring Valley containing the proposed wind project, where they foraged at low elevations. ²⁶

Preconstruction monitoring funded by the proponents found that in the heart of the proposed wind farm (monitoring stations CF-2075 and CF-2081), Mexican free-tailed bats accounted for 88-95% of the observations over the course of two years. At all stations that were away from attractant features such as trees and water, this species accounts for 60% of the bat activity. The preconstruction survey results report states that, "...it is anticipated that Brazilian free-tailed bats are at an elevated risk of collision or barotraumas as a result of their known habit of foraging at higher elevations (McCracken 1996." Elsewhere in this report, biologists state that, "Given the relatively high levels of observed activity, the close proximity of the project area to a known roosting location, and the previous record of mortality at other WGFs (wind generation facilities), the Brazilian free-tailed bat is considered to be at high risk of mortality from

²² EA, page 30.

²³ SWCA Environmental Consultants. 2009. Spring Valley Wind Power Generating Facility Final Preconstruction Survey Results Report. SWCA Project No. 13090. Page 41.

²⁴ Ibid, page 64.

²⁵ Sherwin, Richard E. 2009. A study of the use of Rose Guano Cave by Mexican free-tailed bats (*Tadaarida brasiliensis*). Unpublished.

²⁶ Ibid, page 25.

²⁷ SWCA, page 61.

²⁸ Ibid.

development of the Spring Valley WGF."²⁹ This same report discloses that the little brown bat is the "most at-risk, non-migratory species", and that the silver-haired bat has a "moderate risk of mortality.

Based on figure 2-1.1 in the EA, and figure 3 in the SWCA report, turbine locations Alt 8, 9, and 10, and 58, 59, 73 and 74 and located near water or places having an elevated level of bat activity as measured by monitoring stations CF-2076 and CF-2079. 30

The PEIS provided discussion and guidance regarding impacts to bats and ways to avoid, minimize and mitigate them. It states that migrating bats, such as the Mexican freetailed bat, are at most risk of turbine collision, and that, "with proper design and siting of wind projects (e.g., turbine management and design and land management), bat mortality can be greatly reduced and population-level effects avoided." It also recommends as part of this approach that, "turbines should not be located near known bat hibernation, breeding, and maternity/nursery colonies, in migration corridors, or in flight paths between colonies and feeding areas." 31

The design criteria and mitigation measures in the EA seemingly ignore this advice. Instead, the EA defers to a monitoring and mitigation plan found in Appendix A. It proposes what amounts to adaptive management, rather than any form of avoidance, minimization or mitigation. Mortality surveys would be conducted the first two years of operation, based on the average mortality of all turbines, or an absolute figure for any individual turbine, various reactive measures would be taken, including diurnal or seasonal changes to turbine operation, or shutting down up to 15% of the turbines in a worst-case situation.³²

In light of the presence of the Rose Guano cave and the magnitude of the risk identified through preconstruction surveys, it is incumbent on the BLM to further analyze and disclose the impacts to bat species and to re-evaluate project siting and design. It is unclear what role, if any, NDOW has played in the above. NDOW should be consulted and its recommendations must receive the utmost consideration as part of an EIS process. As a minimum, the Center offers the following suggestions:

- Conduct a landscape analysis to properly site this development given bat, sage grouse and other species concerns. Wind energy efficiency should be compromised, if need be, to attend to species concerns.
- Eliminate turbines near attractant feature, as determined by bat specialists and the peer-reviewed science.

²⁹ Ibid, page 65. ³⁰ Ibid, page 61.

³¹ PEIS, page 5-71.

³² EA, Appendix A.

 Mortality surveys should be conducted for at least the first five years of operation.

4. The preconstruction monitoring of raptors was insufficient.

The proponent's contractor surveyed for raptors once a month (8 hours a day) in March, April and May for spring migration and September, October and November for the fall migration, and each of three observation points were surveyed once during each period. The contractor attempts to given this abbreviated survey protocol a sense of legitimacy by saying that Hawkwatch International ("HWI") survey procedures and forms were used. HWI's survey procedures call for six days a week of observations over a period of weeks during the active migration period. No science is provided to justify the legitimacy or validity of surveying only once a month for eight hours, nor are there any estimates of the statistical precision or error given.

The PEIS offers recommendations for increasing the compatibility of wind development and raptor needs, and includes the following measures:

- "Raptor use of the project area should be evaluated, and the project should be
 designed to minimize or mitigate the potential for raptor strikes. Scientifically
 rigorous raptor surveys should be conducted; the amount and extent of baseline
 data required should be determined on a project-specific basis." (emphasis
 added)
- "Turbine arrays should be configured to minimize avian mortality (e.g., orient rows of turbines parallel to known bird movements)."
- "Avoid the establishment of habitat that attracts high densities of prey animals used by raptors."
- "Tubular supports rather than lattice supports should be used, with no external ladders and platforms." ³⁴

The EA seemingly violates the first point. Since good survey data is lacking, it is unclear whether or not the second point is being followed, although through observation of maps showing the project and topographic orientation it appears to violate it. The implementation of measures in the third point to reduce prey populations are not addressed, while it does appear the fourth point is being implemented.

The BLM must reinitiate a scientifically and statistically based raptor study and utilize the results to redefine where the project is sited and how it is designed. The BLM also must add design and mitigation measures to reduce the presence of raptor prey species within the wind turbine field. The increased length of mortality monitoring suggested for bats will also benefit the management of raptor mortality.

³³ SWCA, page 6.

³⁴ PEIS, pages 5-64-65.

5. The EA does not adequately address rare and imperiled plant species found in the project area.

With regards to special status plant species, the EA only addresses Parish phacelia, finding that it was not observed within the project area but is found nearby.

There are two other species, that while not BLM special status species, are none-theless rare and imperiled and recognized by the natural heritage program as being so.³⁵

Shadescale spring parsley (*Cymopterus basalticus*) is state ranked as "critically imperiled and especially vulnerable to extinction or extirpation due to extreme rarity, imminent threats, or other factors."

Broad-pod freckled milkvetch (*Astragalus lentiginosus v. latus*) is state ranked as "imperiled due to rarity or other demonstrable factors."

According to heritage records and mapping both plants are adjacent to or near the project area, and suitable habitat exists within the project area.

Before approving this project, the BLM must conduct a survey to identify the presence or absence of these plants, and ensure that adverse impacts by the proposed wind project to these species are appropriately avoided, minimized or mitigated.

6. The EA does not adequately address the impacts to pygmy rabbits found on the site.

The pygmy rabbit is an small endemic leporid that is an extreme sagebrush habitat specialist, dependent on sagebrush for 99% of its winter diet and for critical cover from predators, while requiring deep soil sites for construction of burrows. The pygmy rabbit, and its requisite big sagebrush habitats, have suffered dramatic degradation and declines. Pygmy rabbits are not uniformly distributed over large areas but tend to be restricted or clumped, due to sagebrush and burrow requirements. Current populations occupy a geographic range estimated as well less than 10% of the known historic range, and perhaps as little as 5%. ³⁶

The pygmy rabbit in the Columbia Basin has been recognized as Endangered under the ESA. Elsewhere, the pygmy rabbit has been petitioned for listing and has been found warranted and is under review by the FWS.³⁷ The Nevada BLM State Director has placed

³⁵ Nevada Natural Heritage. 2009. Animal and Plant At-Risk Tracking List. Available at: http://heritage.nv.gov/sensanim.htm.

³⁶Committee for the High Desert, Western Watersheds Project and others. 2003. A Petition for rules to List the Pygmy Rabbit *Brachylagus idahoensis* occurring in the coterminous Intermountain and Great Basin region as Threatened or Endangered Under the Endangered Species Act 16 USC 1531 seq.

³⁷ See: http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=2008_register&docid=fr08ja08-21

the rabbit on the special status species list, which places it under agency protections under BLM Manual 6840.2.³⁸

The proponent's study of the project area has found conclusive evidence that pygmy rabbits utilize this site. Up to 323 acres of potential habitat, including 27 acres of good habitat would be degraded or destroyed by the proposed action. Harm to the rabbit would include direct destruction, modification and fragmentation of its habitat, increased risk to predation due to reduction and fragmentation of cover, and increased mortality from vehicle traffic.

The BLM states that the rabbit exists in low numbers in the project area, and that impacts to the species would be negligible since the rabbit is mobile and other habitat exists in the area. 40 41 These statements demonstrate an arrogant disregard for the welfare and viability of this species on this site as well as a disregard for the science presented in the petitioning document. Heady et.al. (2001) summarized a series of habitat use studies and concluded: "The pygmy rabbit is a habitat specialist on all levels – from landscape to placement of burrows and use of home range. This species requires a rigid combination of shrub height and density and other vegetative components. Thus, even in a seemingly contiguous stand of big sagebrush, the landscape may seem highly fragmented for pygmy rabbits. Given their seemingly poor dispersal ability and low reproductive capabilities this may explain their slow recolonization of vacated habitat even under normal conditions. Coupling these factors with loss of sagebrush habitat due to fires, agriculture, and livestock grazing, has likely resulted in the general decline seen in this species" 43

For the BLM to imply that simply because there is sage brush nearby the rabbit would successful recolonize it, in face of the noise and activity associated with the proposed project, is arbitrary and capricious. The BLM's only proposed mitigation measure is, "If turbines 13, 59, and/or 60 are selected, clearance surveys for pygmy rabbits at those locations would be conducted prior to any ground-breaking activities, and on-site monitoring would be performed during construction." In other words, the rabbits would simply be evicted from their occupied territories and sent off to fend for themselves against all biological odds. The proponents own analysis found in Appendix B of the Plan of Development discloses that impacts to the pygmy rabbit could occur at 49 other turbines sites in addition to 13, 59 and 60.

³⁸ See page 6 of this letter for a discussion of these protections.

³⁹ EA, page 37.

⁴⁰ EA, page 36.

⁴¹ EA, page 37.

⁴² Ibid, Committee for High Desert and others.

⁴³ Heady, L. T., K. I. Gabler and J. W. Laundre. 2001. Habitat selection by pygmy rabbits in southeast Idaho. BLM Technical Bulletin. No. 01-7.

⁴⁴ EA, page 52.

⁴⁵ Spring Valley Wind LLC. 2009. Spring Valley Wind Facility Plan of Development. Appendix B.

The Center demands that the BLM step back from this EA and as part of a more inclusive EIS process, engage state biologists and pygmy rabbit experts in analyzing and disclosing the true impacts and their magnitude on the rabbit, and further, to identify the appropriate measures that would avoid, minimize or mitigate these impacts.

7. The EA should reevaluate the design of access roads to minimize their impacts.

The EA envisions a network of 27.5 miles of access roads for the operation and maintenance of the proposed wind facility. Road disturbances may be up to 68 feet wide during the construction phase, and the EA states that they would be reduced to 28 feet wide, including ditches, after construction is completed.⁴⁶

The Center has several concerns regarding this travel network. First, the final width of 28 feet seems excessive and the Center suggests that lateral roads be constructed to single-lane with turnout standards to minimize the long term disturbance and impacts.

Next, there is no discussion about how the temporary disturbance area will be reclaimed, including how invasive plants will be managed in sage grouse rearing habitat, and how raptor prey species will be discouraged from becoming established.

Finally, there is no mention of if off-road vehicle use will be prohibited or discouraged. The Center requests that all wind facility roads be formally and legally closed to public travel and that appropriate measures be incorporated into the facility design to facilitate this restriction. Off-road use is inappropriate given the critical nature of the area to sage grouse, pygmy rabbit, and pronghorn antelope (crucial winter habitat).

In closing, the Center re-emphasizes its belief that in order to comply with existing laws, the BLM must issue a finding of significance resulting from this EA and initiate an EIS process before reaching a decision on permitting the proposed wind energy facility.

We appreciate the opportunity to review the draft EA and look forward to continued participation in the EIS process.

Sincerely yours in conservation,

& Missoke

Rob Mrowka

Nevada Conservation Advocate

2 apprendices

⁴⁶ EA, page 13.

Appendix A
NDOW Letter to BLM, June 24, 2009



STATE OF NEVADA

DEPARTMENT OF WILDLIFE

KENNETH E. MAYER

RICH HASKINS
Deputy Director

1100 Valley Road Reno, Nevada 89512 (775) 688-1500 • Fax (775) 688-1595

June 24, 2009

Bureau of Land Management – Ely District Attn: Mr. Michael Herder – Acting Ely District Manager 702 North Industrial Way HC 33, Box 33500 Ely, NV 89301-9408

Dear Mike:

The Nevada Department of Wildlife (NDOW) has been participating with the Ely District on a set of protocols to direct the wind industry on requirements for project development. While we agree with many of those measures (specifically the section on bats) we are deeply concerned by the lack of protection being afforded to sage-grouse habitat. Although we were a cooperating agency who participated in the Ely Resource Management Plan process, and raised many recommendations that would provide protection to sage-grouse, we were disappointed to see some of those measures disregarded in the final document.

Special Status Measure #40 (in the Ely RMP) which only provides a 0.25 mile buffer zone from above-ground development outside of designated corridors is inadequate to provide the needed protection for crucial sage-grouse habitat. The measure is completely contrary to the input provided by NDOW and now we have greater concerns with the incorporation of this measure into the "Wildlife Monitoring Protocol for Wind Projects". In addition, the measure is inconsistent with statements made in the Ely RMP and may justify a need for a change to that document.

The concerns we raise are not a new issue and we have been pleased to see that recent scientific studies provide support to our concerns. Studies conducted in the late 1990s and into the 2000s including Connelly et al. (2000) identify the need for a protection zone well beyond 0.25 miles from above-ground facilities (which includes met towers and wind turbines). The same could be said for roads and other disturbances.

Many measures and statements in the Ely RMP work towards protection and possible recovery of the species, unlike measure SS-40, which seems to be contrary. The fact that the BLM has designated Greater sage-grouse as a BLM sensitive species should afford it a much higher level of protection and require mitigation such as in measure WL-4 (in the Ely RMP), assuming that energy development is a discretionary activity and protection of sage grouse nesting and brood-rearing habitat is a priority.

Based on the most recent science available with regard to energy development and sagegrouse, the 0.25 mile buffer will not adequately protect sage-grouse habitat to the extent necessary to maintain sage-grouse distribution and abundance. This will mean that the Ely RMP statement on page 37 regarding not contributing for the need to list any special status species, would be inconsistent. Although no scientific research is available on the specific effects of wind energy development on sage-grouse, an extensive amount is available on non-renewable

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energy development such as oil and coal-bed methane gas (CBNG) production and its associated infrastructure on projects in neighboring states. Research in this energy-producing area demonstrates sage-grouse's inability to tolerate disturbance in their habitat through response by nest failures, lek abandonment and decreased recruitment.

Establishing habitat protection areas (or buffers) around prairie grouse leks or other important habitats dates back more than 40 years. Braun et al. (1977) published the first set of guidelines for sage-grouse management and recommended a 2-mile buffer because studies at the time indicated that most nesting occurred within this distance from the lek. More recently, guidelines developed by Connelly et al. (2000) recommended a 2-3 mile buffer based on a considerable amount of data collected from radio marking studies; however, they also recognized that nesting habitats could be as far as 11 miles from leks for migratory populations. Measure 8 under "habitat protection" in that study says that "energy-related facilities should be located greater than 3.2 km (2 miles) from active leks whenever possible".

The main reasons for establishing a buffer or "no surface occupancy zone" are to protect nesting sage-grouse in the vicinity of leks and to avoid disturbance during the breeding period. The following provides examples of nest site selection in terms of distance from the lek. In central and southwest Wyoming, about 25% of 340 nest locations were over 6.5 km (4 miles) from the lek hens were captured on; 15% extended beyond 8 km (5 miles) (Holloran and Anderson 2005). Doherty et al. (2008) found 21% (80 of 381 nests) of nests extending beyond 5 km (3 miles) of the lek of capture. In Idaho, the mean nest distance to lek of capture was 4.6 km (2.9 mile) (Wakkinen et al. 1992). These findings indicate a single lek may support hens from the surrounding 13-80 miles² (34-207 km²) or more of habitat. Migratory sage-grouse cover larger areas, moving over 10 km (6.2 miles) between seasonal ranges (Connelly et al. 2000) with habitat use areas exceeding 2,700 km² (1,040 miles²) (Connelly et al. 2000, Leonard et al. 2000).

The following was adapted from a document entitled, "Using the Best Available Science to Coordinate Conservation Actions that Benefit Greater Sage-Grouse Across States Affected by Oil & Gas Development in Management Zones I-II (Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming)" and is imperative to this correspondence.

Further research in Montana and Wyoming on (CBNG) suggests that impacts to leks from energy development are discernable out to a minimum of 4 miles, and that some leks within this radius have been extirpated as a direct result of energy development (Holloran 2005, Walker et al. 2007). Walker et al. (2007) indicates that the current 0.25-mile buffer lease stipulation is insufficient (this leaves 98% of the landscape within 2 miles open to full-scale energy development) to adequately conserve breeding sage-grouse populations in areas having full CBNG development. In a typical landscape in the Powder River Basin, 98% CBNG development within 2 miles of leks is projected to reduce the average probability of lek persistence from 87% to 5% (Walker et al. 2007). Only 38% of 26 leks inside of CBNG development remained active compared to 84% of 250 leks outside of development (Walker et al. 2007). Of leks that persisted, the numbers of attending males were reduced by approximately 50% when compared to those outside of CBNG development (Walker et al. 2007).

Walker et al. (2007) provides an impact analyses model based on a 7-year dataset where probability of lek persistence is strongly related to the extent of

sagebrush habitat and energy development within 4 miles of the lek and the extent of agricultural tillage in the surrounding landscape. The estimated probabilities of lek persistence are only reliable for the length of the dataset, and it is not understood how other stressors such as West Nile virus or invasive weeds will cumulatively impact sage-grouse over longer time periods. While increased no-surface occupancy (NSO) buffers alone are unlikely to conserve sage-grouse populations, results from Walker et al. 2007 suggest they will increase the likelihood of maintaining the distribution and abundance of grouse and should increase the likelihood of successful restoration following energy development. Figures 1 portrays the likelihood of lek persistence in relation to the distance of full scale energy development from the lek.

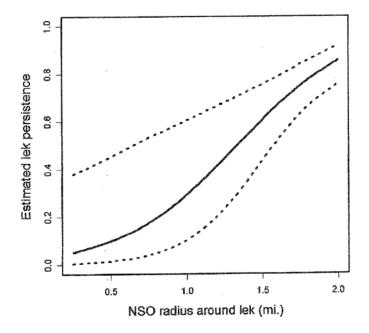


Figure 1. Estimated probability of lek persistence (dashed lines represent 95% Cls) in fully-developed coal-bed natural gas fields within an average landscape in the Powder River Basin (74% sagebrush habitat, 26% other habitats types) with different sizes of no-surface-occupancy (NSO) buffers around leks, assuming that only CBNG within 2 miles of the lek affects persistence. Buffer sizes of 0.25 mi., 0.5 mi., 0.6 mi., and 1.0 mi. result in estimated lek persistence of 5%, 11%, 14%, and 30%. Lek persistence in the absence of CBNG averages ~85%.

Although oil and gas facilities are considered by some to be very different than wind energy facilities, their footprint on the landscape and associated infrastructure is similar. Some evidence of the effect of these developments on sage-grouse has been documented in a Wyoming study conducted by Holloran (2005) where male sage-grouse showed decreased lek

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attendance rates in response to increased road traffic. Lyon (2000) found that roads with light traffic (1-12 vehicles/day) were correlated with less successful nesting by sage grouse hens. Additionally, light traffic near leks may also reduce nest-initiation rates and increase distances hens move from leks during nest-site selection (Lyon and Anderson 2003). Other recent work on coal-bed methane development indicates 1 well per 1.5 sections of land diminishes the use of otherwise suitable sage grouse winter habitat by 10% and with 22 wells, use is diminished by 60% (Doherty et al. 2008). The latter figure (22 wells / 960 acres) is likely similar to some of the densities observed for wind turbine placement (ODFW in draft).

In addition to disturbance created from the placement of turbines and roads within seasonal sage-grouse habitats, construction of transmission lines within these areas can have significant effects. For example, leks within 0.25 miles of new power lines constructed for coalbed methane development in the Powder River Basin of Wyoming had significantly slower growth rates compared to leks further from these lines, which was presumed to be the result of increased raptor predation (Braun et al. 2002). The progress reports of the University of Nevada's Falcon to Gonder Project ("Dynamics of Greater Sage-grouse (Centrocercus urophasianus) Populations in Response to Transmission Lines in Central Nevada") identify the increased use of the powerline by ravens, even with perching and nesting deterrents in place, as well as increased raven-associated disturbances at leks (Blomberg and Sedinger, unpublished report).

In an Oregon example, the Sage Hen Hill Lek in Harney County was first counted in 1949 and had an average of 41 males counted until 1980. Between 1980 and 1982, a 250kV transmission line was constructed within 0.5 miles of the lek site. An average of 5 males has been counted at the lek since 1981 (28 males that year), with no males counted since 2006. The cause of this decline or perhaps extirpation cannot be directly linked to the power line, but it is likely part of a cumulative effect from development in the area. Note that statewide from 1980 to 1988 (the period when Sage Hen Hill lek declined) sage-grouse populations reached relatively high levels (ODFW in draft).

Based on recent research on oil/gas developments in Wyoming and Montana, the 3-mile buffer appears to be a reasonable set-back distance that will minimize the impacts on sage-grouse (Walker et al. 2007, Doherty et al. 2008). However, in light of the information provided, Colorado (Colorado Steering Committee 2008) and Wyoming (Governor's Executive Order 2008) adopted a 4-mile buffer to protect sage-grouse breeding habitat. Additionally, a BLM Instruction Memorandum from the State Director of Oregon and Washington limits the construction of wind energy grids (wind farms) to no closer than a 4.8 km (3 mile) radius of sage-grouse lek sites while other stipulations are also made for winter and brood rearing habitat as well as access roads and power lines (USDI – BLM, 2009).

Special Status Species measure #40 (in the ELY RMP) is inconsistent with Governor Gibbons' Executive Order 2008-09-26 which declares it a State policy to protect and preserve Greater sage-grouse habitat and to fully implement the protection measures identified in the 2004 Governor's Sage-grouse Plan. It is also inconsistent with the recommendations identified in the Nevada Renewable Energy Transmission Access Advisory Committee (RETAAC) of which the Nevada State BLM Office was a contributing member. The RETAAC Phase II final report recognizes the protection measures offered by Connelly et al. (2000) including: the avoidance of building power lines and other tall structures within 3.2 km (2 miles) of recognized habitats.

We strongly encourage the Nevada State BLM Office and the Ely District to reconsider the 0.25 mile "no development" buffer for active sage grouse leks and recommend at least a 3-mile setback. The Ely District must also realize that this buffer may not adequately protect sage-

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grouse either because of the migratory nature of sage grouse populations in both White Pine and Lincoln Counties. Extensive radio-marking efforts have indicated that sage-grouse in this district often utilize low elevation winter and breeding habitat and then migrate (>10km) to high elevation nesting and brood rearing habitat. In certain cases such as these, a 3-mile buffer will not provide proper protections for sage-grouse during the nesting and brood rearing periods. Important nesting and brood rearing habitat must be identified and avoided where possible to ensure the long-term survival of this species. We recommend that the Ely District identify wind development zones in existing non sage-grouse habitats such as pinyon and juniper woodlands or salt desert shrub communities with adequate wind potential.

We would appreciate a response from your office at your earliest convenience and would welcome an open discussion of the issue. Please feel free to contact me directly at (775) 777-2306. Thank you for your time and attention to this matter.

Sincerely,

Steve Foree

Regional Habitat Supervisor - Eastern Region

cc: Mr. Mike Holbert – Deputy Director Division of Natural Resources, Land and Planning – BLM Nevada State Office

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Appendix B		
NDOW letter to BLM, September 1, 2009		



STATE OF NEVADA

DEPARTMENT OF WILDLIFE

1100 Valley Road Reno, Nevada 89512 (775) 688-1500 • Fax (775) 688-1595 RICHARD L. HASKINS II

Deputy Director

KENNETH E. MAYER

September 1, 2009

Mr. Ron Wenker Nevada State Director Bureau of Land Management 1340 Financial Blvd. Reno, NV 89502

Dear Director Wenker:

J am writing you regarding a serious threat to the proper management of Greater Sage-grouse populations located within the Ely District. The Nevada Department of Wildlife was a Cooperating Agency in the formation of the Ely Resource Management Plan. Through that process, our representative identified concerns with setting too small a zone of protection around active sage-grouse leks and had vigorously fought for a two-mile buffer. It was our assumption that the Ely District Staff were listening, only to have the document come out with a ¼ mile zone of protection. The issue has surfaced once again in the formation of a set of draft protocols for wind energy development. In response to various versions of that document, my staff provided the "science" which not only justifies the requested two-mile buffer but suggests that upwards of a four-mile buffer around active leks may be more reasonable.

We were disheartened by Ms. Thomas's letter of response which quickly dismisses scientific study in favor of decisional flexibility for your agency. There is a strong need to provide protection for dwindling populations of sage-grouse. It is our opinion that the ¼ mile buffer zone (that may protect the lek site but not nesting, brood-rearing or winter habitat) which the Ely District is employing is inadequate to provide ample protection from energy facilities, transmission lines or mines that would degrade available habitat. That policy could help justify a decision to list the species, which would have disastrous impacts to the multiple uses that your agency's planning considers. The USFWS is currently reviewing regulatory mechanisms in place to protect sage-grouse to determine if adequate stipulations are in place to conserve the species. It would be costly to not only go through the listing process but could lead to reconsideration of project siting in sage-grouse habitat. Minimally, we would like to see the Ely District be consistent with protection measures of other BLM Districts in Nevada, other agencies and neighboring States.

I suggest we meet to discuss a means to provide adequate protection measures to conserve populations long-term, and reasons to forestall a decision which would provide protection by law.

Sincerely,

Kenneth E. Mayer

Director

DP/tw/KEM

(NSPO Rev. 2-09)