

US EPA ARCHIVE DOCUMENT



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX**

75 Hawthorne Street
San Francisco, CA 94105

December 17, 2008

Mark Chandler
Attn: Searchlight Wind Energy EIS Project Manager
Bureau of Land Management/Las Vegas Field Office
4701 North Torrey Pines Drive
Las Vegas, NV 89130-2301

Subject: Notice of Intent to Prepare an Environmental Impact Statement for a Proposed Wind Energy Project, Clark County, Nevada

Dear Mr. Chandler:

The U.S. Environmental Protection Agency (EPA) has reviewed the December 16, 2008 Notice of Intent (NOI) to prepare an Environmental Impact Statement (EIS) for the proposed Wind Energy Project in Clark County, Nevada. Our review is pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508), and our NEPA Review authority under Section 309 of the Clean Air Act.

EPA supports increasing the development of renewable energy resources. Using renewable energy resources such as wind power can help the nation meet its energy requirements without generating greenhouse gas emissions. To assist in the scoping process for the project, we have identified several issues for your attention in the preparation of the EIS. We are most concerned about the following issues: water resources, habitat, vegetation, wildlife, and indirect and cumulative impacts.

We appreciate the opportunity to review this NOI and are available to discuss our comments. Please send one hard copy of the Draft EIS and two CD ROM copies to this office at the same time it is officially filed with our Washington D.C. Office. If you have any questions, please contact me at (415) 972-3545 or at mcperson.ann@epa.gov.

Sincerely,

/s/

Ann McPherson
Environmental Review Office

Enclosures: Detailed Comments

US EPA DETAILED COMMENTS ON THE SCOPING NOTICE FOR A PROPOSED WIND ENERGY PROJECT IN CLARK COUNTY, NEVADA, DECEMBER 17, 2008

Project Description

Searchlight Wind Energy, LLC has submitted an application for the construction, operation, maintenance, and termination of a wind energy generation site. The proposed project would consist of approximately 156 wind turbines located on 24,383 acres of public lands surrounding the town of Searchlight, Nevada. The wind turbines would have a generating capacity of approximately 359 megawatts (MW). Related structures would include a substation administered by the Western Area Power Administration (WAPA).

Statement of Purpose and Need

The Environmental Impact Statement (EIS) should clearly identify the underlying purpose and need to which the Bureau of Land Management (BLM) is responding in proposing the alternatives (40 CFR 1502.13). The *purpose* of the proposed action is typically the specific objectives of the activity, while the *need* for the proposed action may be to eliminate a broader underlying problem or take advantage of an opportunity. The purpose and need should be a clear, objective statement of the rationale for the proposed project, as it provides the framework for identifying project alternatives. The EIS should discuss the proposed project in the context of the larger energy market that this project would serve.

Alternatives Analysis

The EIS should include a range of reasonable alternatives that meet the stated purpose and need for the project and that are responsive to the issues identified during the scoping process. This will ensure that the EIS provides the public and the decision-maker with information that sharply defines the issues and identifies a clear basis for choice as required by the National Environmental Policy Act (NEPA). The Council on Environmental Quality (CEQ) recommends that all reasonable alternatives should be considered, even if some of them could be outside the capability of the applicant or the jurisdiction of the agency preparing the EIS for the proposed project. EPA encourages selection of feasible alternatives that will minimize environmental degradation. The potential environmental impacts of each alternative should be quantified to the greatest extent possible.

Water Resources

Water quality may be adversely affected if construction alters the hydrology of springs and surface runoff such that erosion carries sediment to tributaries and ultimately to streams. The EIS should disclose which waterbodies may be impacted by the project, the nature of the potential impacts, and the specific pollutants likely to impact those waters. The EIS should provide information on Clean Water Act (CWA) Section 303(d) impaired waters in the project area, if any, and efforts to develop and revise Total Maximum Daily Loads (TMDLs). Along with the disclosure of impacts, the EIS should state appropriate Best Management Practices (BMPs) that would be used to minimize the impacts.

The project applicant should coordinate with the U.S. Army Corps of Engineers to determine if the proposed project requires a Section 404 permit under the CWA. The EIS should describe all waters of the United States (WOUS) that could be affected by the project alternatives, and include maps that clearly identify all waters within the project area. The discussion should include acreages and channel lengths, habitat types, values, and functions of these waters. If a permit is required, EPA will review the project for compliance with *Federal Guidelines for Specification of Disposal Sites for Dredged or Fill Materials*. Pursuant to 40 CFR 230, any permitted discharge into waters of the U.S. must be the “least environmentally damaging practicable alternative” (LEDPA) available to achieve the project purpose. If, under the proposed project, dredged or fill material would be discharged into WOUS, the EIS should discuss alternatives to avoid those discharges and how potential impacts would be minimized and mitigated.

Public drinking water supplies and/or their source areas often exist in many watersheds. Source water is water from streams, rivers, lakes, springs, and aquifers that is used as a supply of drinking water. Source water areas are delineated and mapped by the state for each federally-regulated public water system. The 1996 amendments to the Safe Drinking Water Act (SDWA) require federal agencies to protect sources of drinking water for communities. Therefore, EPA recommends that the EIS identify:

- a) source water protection areas within the project area;
- b) activities that could potentially affect source water areas;
- c) potential contaminants that may result from the proposed project; and
- d) measures that would be taken to protect the source water protection areas.

Habitat, Vegetation, and Wildlife

During construction of the proposed project, vegetation would be cleared and soils moved during the construction of roads, wind turbine foundations, substation, switchyard, and other facilities. The EIS should describe the current quality and capacity of habitat and its use by wildlife in the proposed project area, especially bats and avian populations. The EIS should describe the critical habitat for the species; identify any impacts the proposed project will have on the species and their critical habitats; and how the proposed project will meet all requirements under the Endangered Species Act, including consultation with the U.S. Fish and Wildlife Service, National Oceanographic Atmospheric Administration, and Nevada Department of Wildlife.

The EIS should identify all petitioned and listed threatened and endangered species that might occur within the project area. The EIS should identify and quantify which species might be directly or indirectly affected by each alternative. We suggest that the BLM review the following documents: 1) the U.S. Fish and Wildlife Service’s 2003 *Interim Guidance on Avoiding and Minimizing Wildlife Impacts from Wind Turbines*, and 2) the 2005 GAO Report to Congressional Requesters, *Wind Power: Impacts on Wildlife and Government Responsibilities for Regulating Development and Protecting Wildlife*.

Wind energy generation projects have the potential to disrupt important wildlife species habitat, resulting in mortality of migratory species such as birds and bats due to collisions with rotors. The EIS should consider whether migratory birds are likely to use the project area and avoid, if possible: 1) areas supporting a high density of wintering or migratory birds, 2) areas with high level of raptor activity, and 3) breeding, wintering or migrating populations of less abundant species which may be sensitive to increased mortality as a result of collision. A comprehensive monitoring program should be designed to evaluate impacts on bats and avian species. We suggest that the BLM conduct pre-construction baseline surveys to evaluate the site for its importance to bats and avian species, as well as post-construction surveys to determine the extent of mortalities and to determine the effectiveness of mitigation measures. Surveys should be conducted by a qualified biologist during the appropriate time of year. BLM actions should promote the recovery of declining populations of species.

Collision risk depends on a range of factors related to species, numbers and behavior, weather conditions, topography, and lighting. The EIS should identify and describe specific turbine types and their operating characteristics and consider turbine design standards that minimize adverse impacts to wildlife, particularly birds and bats. Consideration should be given to reducing the perching and nesting opportunities, which may help reduce potential collisions.

Because the project may have impacts on native and rare plants, the EIS should include general locations of rare plants, and how these sites will be managed to minimize impacts on the plants. If any pesticides and herbicides will be used for vegetation treatment during the proposed project operations, the EIS should address any potential toxic hazards related to the application of the chemicals, and describe what actions will be taken to assure that impacts by toxic substances released to the environment will be minimized. If vegetation would be burned, then the EIS should include a smoke management program that would be followed to reduce public health impacts and potential ambient air quality exceedances.

Air Quality

The EIS should provide a detailed discussion of ambient air conditions (baseline or existing conditions), National Ambient Air Quality Standards (NAAQS), criteria pollutant nonattainment areas, and potential air quality impacts of the project (including cumulative and indirect impacts) for each fully evaluated alternative. Such an evaluation is necessary to assure compliance with State and Federal air quality regulations, and to disclose the potential impacts from temporary or cumulative degradation of air quality. The EIS should describe and estimate air emissions from potential construction and other activities, as well as proposed mitigation measures to minimize those emissions. EPA recommends an evaluation of the following measures to reduce emissions of criteria air pollutants and hazardous air pollutants (air toxics).

Construction Emissions Mitigation

- Ensuring that diesel-powered construction equipment is properly tuned and maintained, and shut off when not in direct use.
- Prohibiting engine tampering to increase horsepower.
- Locating diesel engines, motors, and equipment as far as possible from residential areas

- and sensitive receptors (schools, daycare centers, and hospitals).
- Reducing construction-related trips of workers and equipment, including trucks.

Fugitive Dust Source Controls

- Stabilize open storage piles and disturbed areas by covering and/or applying water or chemical/organic dust palliative where appropriate.
- Install wind fencing and phase grading operations where appropriate, and operate water trucks for stabilization of surfaces under windy conditions.
- When hauling material and operating non-earthmoving equipment, prevent spillage and limit speeds to 15 mph. Limit speed of earth-moving equipment to 10 mph.

Climate Change

Currently, there is concern that continued increases in greenhouse gas emissions resulting from human activities contribute to climate change. Effects of climate change may include changes in hydrology, sea level, weather patterns, precipitation rates, and chemical reaction rates. The EIS should present a general, qualitative discussion of the anticipated effects of climate change on the project, including potential effects at a regional level. Also, the EIS should quantify and disclose greenhouse gas emissions associated with project construction/operation and discuss mitigation measures to reduce emissions.

Noise

The EIS should include an assessment of noise levels from the wind turbines. Decibel levels of the turbines should be evaluated as should the effects of noise levels on a variety of species, as well as effects on property values, residences, and recreational use.

Visual Impacts

Careful attention should be given to how a wind turbine array is set against the landscape. Steps should be taken to minimize the visual impacts and make the wind turbines less obtrusive.

Indirect and Cumulative Impacts

EPA has issued guidance on how we are to provide comments on the assessment of cumulative impacts, *Consideration of Cumulative Impacts in EPA Review of NEPA Documents*, which can be found on EPA's Web site at: <http://www.epa.gov/compliance/resources/nepa.html>. The guidance states that in order to assess the adequacy of the cumulative impacts assessment, five key areas should be considered. EPA tries to assess whether the cumulative effects' analysis:

- a) identifies resources, if any, that are being cumulatively impacted;
- b) determines the appropriate geographic (within natural ecological boundaries) area and the time period over which the effects have occurred and will occur;
- c) looks at all past, present, and reasonably foreseeable future actions that have affected, are affecting, or would affect resources of concern;

- d) describes a benchmark or baseline; and
- e) includes scientifically defensible threshold levels.

The EIS document should clearly identify the resources that may be cumulatively impacted, the time over which impacts are going to occur, and the geographic area that will be impacted by the proposed project. The EIS should focus on resources of concern – those resources that are “at risk” and/or are significantly impacted by the proposed project, before mitigation. Where adverse cumulative impacts may exist, the EIS should disclose the parties that would be responsible for avoiding, minimizing, and mitigating those adverse impacts.

As an indirect result of providing additional power, it can be anticipated that this project will allow for development and population growth to occur in those areas that receive the generated electricity. The EIS should describe the reasonably foreseeable future land use and associated impacts that will result from the additional power supply. The document should provide an estimate of the amount of growth, its likely location, and the biological and environmental resources at risk.

Coordination with Tribal Governments

The EIS should discuss whether or not the proposed project may affect historical or traditional cultural places of importance to Native American communities. The document should identify historic resources, and assure that treaty rights and privileges are addressed appropriately. If the proposed project will have impacts on Native Americans, the development of the EIS document should be conducted in consultation with all affected tribal governments, consistent with Executive Order 13175, *Consultation and Coordination with Indian Tribal Governments* (November 6, 2000). The EIS should describe the process and outcome of government-to-government consultation between the BLM and each of the tribal governments within the project area, issues that were raised (if any), and how those issues were addressed in the selection of the proposed alternative.

Section 106 of the National Historic Preservation Act (NHPA) requires a federal agency, upon determining that activities under its control could affect historic properties, consult with the appropriate State Historic Preservation Officer/Tribal Historic Preservation Officer (SHPO/THPO). Executive Order 13007, *Indian Sacred Sites* (May 24, 1996), requires federal land managing agencies to accommodate access to, and ceremonial use of, Indian sacred sites by Indian Religious practitioners, and to avoid adversely affecting the physical integrity of such sacred sites. The EIS should address the existence of Indian sacred sites in the project area. It should address Executive Order 13007, distinguish it from Section 106 of the NHPA, discuss how the BLM will avoid adversely affecting the physical integrity of sacred sites, if they exist, and address other requirements of the Executive Order. The EIS should provide a summary of all coordination with Tribes and with the SHPO/THPO, including identification of National Register of Historic Places eligible sites, and development of a Cultural Resource Management Plan.

Environmental Justice and Public Participation

Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations* (February 11, 1994), directs federal agencies to identify and address disproportionately high and adverse human health or environmental effects on minority and low-income populations, allowing those populations a meaningful opportunity to participate in the decision-making process. The EIS should include an evaluation of environmental justice populations within the geographic scope of the project. If such populations exist, the EIS should address the potential for disproportionate adverse impacts to minority and low-income populations, and the approaches used to foster public participation by these populations. Assessment of the project's impact on minority and low-income populations should reflect coordination with those affected populations.

The EIS should demonstrate that communities bearing disproportionately high and adverse effects have had meaningful input into the decisions being made about the project. The EIS should include information describing what was done to inform the communities about the project and the potential impacts it will have on their communities (notices, mailings, fact sheets, briefings, presentations, exhibits, tours, news releases, translations, newsletters, reports, community interviews, surveys, canvassing, telephone hotlines, question and answer sessions, stakeholder meetings, and on-scene information), what input was received from the communities, and how that input was utilized in the decisions that were made regarding the project. One tool available to locate Environmental Justice populations is the Environmental Justice Geographic Assessment tool available online at: <http://www.epa.gov/enviro/ej/>.

Coordination with Land Use Planning Activities

The EIS should discuss how the proposed action would support or conflict with the objectives of federal, state, tribal or local land use plans, policies and controls in the project area. The term "land use plans" includes all types of formally adopted documents for land use planning, conservation, zoning and related regulatory requirements. Proposed plans not yet developed should also be addressed if they have been formally proposed by the appropriate government body in a written form (CEQ's Forty Questions, #23b).