



July 10, 2006

Via Electronic Mail and Overnight Mail

Office of Electricity Delivery and Energy Reliability
 Room 8H-033
 U.S. Department of Energy
 1000 Independence Avenue, S.W.
 Washington, D.C. 20585

Re: Comments on the Preliminary Map of Potential Energy
 Corridors – Programmatic Environmental Impact Statement
 (PEIS)

Dear Sir/Madam:

On behalf of Defenders of Wildlife and our more than half a million members and supporters nationwide, I am writing to provide comment on the preliminary map for the Programmatic Environmental Impact Statement for “Designation of Energy Corridors on Federal Land in the 11 Western States” (PEIS). Defenders of Wildlife is a national conservation organization dedicated to the protection of all native wild animals and plants in their natural communities. As part of our California program work, Defenders staff in California have been following the energy corridor issue.

We are providing these comments to assist the U.S. Department of Energy (DOE) and cooperating agencies in identifying and addressing the multitude of conservation issues raised by the preliminary map of proposed corridors. We also incorporate by reference comments submitted to the DOE by Cynthia Wilkerson, on the behalf of the California office of Defenders of Wildlife on November 1, 2005, and written comments submitted, on July 10, 2006, by the Wilderness Society.

To begin with, the preliminary map of proposed corridors shows potential intrusions in a multitude of areas important to imperiled wildlife. Of particular concern are delineated corridor routes that do not follow any pre-existing pipelines, transmission lines, roads or highways. For example, there are a number of proposed routes through the California desert that appear to cut through important and currently undisturbed habitat for the state and federally listed desert tortoise and state listed Mohave ground squirrel. In addition, a number of proposed corridors through northern California forest may threaten conservation efforts for the federally listed Pacific fisher and wolverine. Finally, routes through the southern California forests are also concerning due to threats to imperiled wildlife such as the California condor.

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I will focus the remainder of our comments on issues of concern that the DOE should address in the PEIS. Because the project-level placement of pipelines and associated infrastructure may be afforded a Categorical Exclusion under the newly released federal Energy Policy, the guidelines and criteria for citing of pipelines and associated infrastructure covered under the PEIS must require significant examination in order to fully analyze the potential impacts.

In terms of wildlife impacts, the PEIS must address several impacts, including impacts stemming from the construction, on-going use, and maintenance of the energy corridor infrastructure. As such, the PEIS must meet the legal standards set forth by the Migratory Bird Treaty Act, the Bald and Golden Eagle Protection Act, the California Fish and Game Codes and the California and Federal Endangered Species Acts. Additionally, private entities proposing to build new energy infrastructure on federal lands must follow state law. In California, this includes meeting the “minimize and fully mitigate” standard set out by CEQA.

Roads and other linear structures such as energy corridors present a particular challenge to wildlife in the form of habitat fragmentation. Continued habitat fragmentation forces wildlife to live on ever-shrinking islands of habitat, where it is more difficult for them to find food, water, shelter, mates, and protection from predators. Genetic problems such as inbreeding appear, and populations become more susceptible to catastrophic events such as wildfire. The resulting fragmented habitat inevitably leads to smaller populations of wildlife, and extinction of populations or species becomes more likely.

We specifically request that the DOE follow the following recommendations while developing the map and PEIS:

- Minimize the project footprints
- Avoid steep slopes in order to reduce erosion impacts
- Avoid sensitive and rare natural communities
- Analyze, avoid, minimize, and otherwise fully mitigate impacts to wide-ranging species
- Require structures that discourage perching by raptors
- Avoid identified wildlife corridors (see Missing Linkages project in CA)
- Avoid fly-ways, especially for raptors
- Avoid development of priority areas as established in state comprehensive wildlife plans, regional conservation plans, and recovery plans for threatened and endangered species
- Avoid development that severs habitat corridors set out in any state Connectivity Plans (Defenders is currently working with UC Davis Center for Road Ecology, U.S. Forest Service and other partners to create a California Connectivity Plan)
- Avoid wetland resources (including the upland elements of the watersheds that support the wetlands themselves)
- Avoid impacts to species of plants and animals listed under the state and federal Endangered Species Acts
- Avoid overlap with designated critical habitat for federally listed species
- Be consistent with state and federal recovery plans for listed species
- Avoid local, state, or federally protected lands

- Be consistent with regional conservation plans (both current and draft)
- Minimize growth-inducing impacts
- Be consistent with the conservation priorities of existing BLM regional land management plans
- Minimize impacts due to on-going maintenance of the pipelines, transmission lines, or distribution facilities
- Minimize cumulative impacts due to existing and planned development in the region
- Actively restore native vegetation to the project footprints after the infrastructure has been constructed

Electricity corridors pose particular problems for birds in the form of collisions and electrocutions. Raptors and large birds are electrocuted through phase-to-phase and phase-to-ground contacts while small birds are killed by bushings and transformers as well as other pole hardware. Nationally, researchers have documented fatal impacts from powerlines for nearly 350 species (Manville 1999) with a rough estimate ranging from tens of thousands to 1.5 million collisions (Erickson 2002; and current research indicates that the number of deaths is drastically underestimated). These mortalities have contributed to declines in local and regional populations. As part of the Pacific flyway, California is a critical movement corridor for a large number of wintering birds that utilize our Refuges and flooded agricultural fields. Electrocutions most often occur on distribution line less than 70kV and collisions are most likely to occur on lines carrying a greater amount of voltage. Collisions are most likely to occur when the transmission lines are within the daily use areas of the birds – areas that they move amongst to roost and forage – and when they are migrating through an area. Body size, maneuverability, and height of flight also contribute to collision risk.

We request that the DOE follow the Avian Protection Plan Guidelines set forth by the Edison Electric Institute's Avian Power Line Interaction Committee and the U.S. Fish and Wildlife Service in April 2005. This document can be found on the internet and details construction design standards, nest management procedures, an avian reporting system, risk assessment methodology, mortality reduction measures, avian enhancement options, and quality control.

Specific recommendations that should be included in the PEIS are: site analysis and bird use surveys to avoid collision problems; bird flight diverters to make lines more visible, avoid high bird use areas; site according to topographic features; minimum spacing of 60 inches between phases and phase to ground; cover or insulate ground wires and cover conductors; and changing cross arms and installing perch guards. The agencies must tailor avoidance measures to the specific location and species of concern as current research indicates varying success of different techniques. For example, a study in Colorado demonstrated that perch guards might shift raptors to unsafe portions of a power pole (Harness 1999).

Any management actions designed to avoid, minimize, or otherwise mitigate impacts to wildlife must also be monitored adequately to demonstrate success or need for adaptive measures. Not only will this ensure that the techniques are effective, it will also provide critical data to inform the state of the knowledge on effective methods that can be employed in other areas. The PEIS

must require that project proponents implement and monitor contingency plans and adaptive measures for success in order to address the potential environmental impacts.

Further, collisions and electrocutions of birds and bats also cause wildfires, power outages, and reduce reliability of service. The wildfire impact will undoubtedly have broad ecological impacts.

We thank you for your consideration of these comments. If you have any questions, please do not hesitate to give me a call at (916) 313-5800 ex. 109.

Sincerely,

A handwritten signature in black ink, appearing to read "Kim Delfino". The signature is written in a cursive style with a large, stylized initial "K".

Kim Delfino
California Program Director