

Scientists -- desert energy projects should tread lightly

David Danelski, Riverside Press-Enterprise, 9-14-10

Eight large solar developments proposed in the California desert would cover 59 square miles of public land untouched by plows or bulldozers -- the type of land a panel of science advisers says should be preserved -- as the nation rushes to reduce greenhouse gases and become less reliant on oil imports.

In a report to federal and state agencies, the scientists said undisturbed open spaces and important wildlife habitat should not be permanently sacrificed when other alternatives exist.

Developers of the eight projects are seeking approvals by the end of the year in order to qualify for federal stimulus dollars.

The scientists say big solar, wind and other energy projects should be built on "disturbed land," such as denuded former farms or on the land along roads, canals and power lines. Such places already have been damaged to the point where protected species, such as the desert tortoise, have been driven out, the report says.

"From a scientific standpoint, preserving the desert ecosystems is a no-brainer," said Wayne D. Spencer, a conservation biologist with Conservation Biology Institute in San Diego and the panel leader. "There is a disconnect, a mismatch between what is going on now and what we are recommending."

Energy developers say the advice from scientists isn't practical and that public land is needed to meet clean-energy goals.

"These recommendations shouldn't be taken as gospel," said Rachel McMahon, director of government affairs for Solar Millennium LLC, which had two proposals in eastern Riverside County on track for approval this year. "A balance must be struck between zero-emissions electrical generation development and maximum environmental protections," she said.

The scientists' 172-page report, prepared for the California Energy Commission, the federal Bureau of Land Management and state and federal wildlife agencies, was funded by a grant from the National Fish and Wildlife Foundation, a nonprofit organization created by Congress in 1984 that uses public and private money for conservation and environmental endeavors.

The panel's recommendations would not affect the eight projects, which the government has fast-tracked for reviews by the end of the year. The scientists' views were solicited for an inter-agency California desert conservation plan that isn't expected to be completed until late 2012, said David Harlow, a contract consultant overseeing the plan for the California Energy Commission. State and federal officials will use the plan to guide future energy development in the Southern California desert.

Private Vs. Public Land

Environmentalists have been concerned about the use of undisturbed public land. They say government reviews of the projects are too rushed and that ample land with little habitat value is available to meet the state's alternative energy needs.

"This isn't well thought out," said April Sall, conservation director at The Wildlands Conservancy, based in Oak Glen. "This is the biggest threat to the desert ever faced, and we can't afford to get this wrong. ... We should be developing the disturbed lands first, and we need more incentives for rooftop solar."

California utilities face a tough state mandate -- to secure 33 percent of their electricity from renewable sources by 2020.

State and federal officials are scrambling to finish environmental reviews so qualified projects can be approved by the end of the year, necessary to qualify for federal stimulus money that can cover as much as 30 percent of construction costs.

Relying on disturbed lands isn't realistic because such properties are privately owned and scattered, making it difficult for energy companies to assemble the large sites they need, said Keely Wachs, spokesman for the Oakland-based BrightSource Energy. The company's solar project, which could cover 5.6 square miles in northeastern San Bernardino County, is one of the eight expected to go before the California Energy Commission before the end of the year.

McMahon, of Solar Millennium, said public land in the desert is a valuable solar resource that should remain open for consideration. The recommendations come from the narrow perspective of environmental scientists and don't take into consideration economics, proximity to power lines and other practical considerations, she said.

Different approach

The science advisers' recommendations reflect a much different approach than what's now under consideration.

Beyond preserving the undisturbed lands, where native plants are intact, the science advisers say energy developers should avoid disrupting "essential physical geology process," such as wind-driven sand dunes and alluvial fans -- places where streams of runoff spread out and deposit water and minerals to wide areas.

The BrightSource project in Ivanpah Valley would encompass part of an alluvial fan on the east side of the Clark Mountains, near Primm, Nev.

Wachs, the BrightSource spokesman, said the development is configured so that it wouldn't interfere with natural water flows in the alluvial fan areas.

RELOCATION WOES

The science advisers also said that wildlife displaced by energy projects should not be relocated to reserve areas inhabited by a thriving population of the same species.

Two of the energy companies, BrightSource and Tessera Solar, are working with wildlife officials on plans to move desert tortoises from their solar development sites in the Mojave Desert. The tortoises are listed under the Endangered Species Act as threatened with extinction.

Kristin H. Berry, one of the science advisers and a research wildlife biologist with the U.S. Geological Survey, said relocations of tortoises and other sensitive animals have not proven successful.

Moving tortoises can spread disease, she said. It can also put animals in the receiving areas at risk, because

there may not be enough food, water and shelter for both the residents and the newcomers, Berry said.

One alternative may be to move tortoises to "dead zones" along roadways, where traffic has killed off the animals over the years, she said. The roadway can be fenced to keep the animals out of harm's way. The animals, however, still may be at greater risk from predators such as coyotes and ravens that forage along roadways.

"There are just so many unknowns," Berry said by telephone. "We need to have a lot more data before we can be comfortable with translocations."

Sall, of The Wildlands Conservancy, said desert ecosystems are slow to recover from development. Desert plants, such as creosote bushes, may take hundreds of years to return fully to an area that has been graded or plowed. She said her organization has identified more than 300,000 acres of disturbed land that can be used for renewable energy development. She said that is more than enough to meet California's energy mandates.

"Our policy should have no regrets," she said "We shouldn't grade or blade these pristine or undisturbed desert landscapes."