

Eagle conservation effort at Solano wind energy project is first of its kind

Matt Weiser, Sacramento Bee, 9-27-13

Wind energy is known to be environmentally friendly, except for one persistent concern: The spinning turbine blades often kill birds, especially raptors such as eagles.

Now, a wind energy project in Solano County may become the first in the United States to commit to protecting golden eagles under federal law. To make amends for the golden eagles likely to be killed by its turbine blades, the 100-megawatt project near Rio Vista, known as Shiloh IV, would agree to modify power lines in Monterey County to prevent golden eagles from being electrocuted.

The proposal is contained in a draft conservation plan released Thursday by the U.S. Fish and Wildlife Service, which is charged with protecting eagles and other migratory birds. The proposal is open to a 45-day public comment period, with adoption expected early in 2014.

“It really does set a precedent in that it does show the service can work with the wind industry,” said Eric Davis, assistant regional director for the U.S. Fish and Wildlife Service. “Renewable energy is here to stay, and we need to ensure eagles and other wildlife are here to stay as well.”

Such an agreement has never been adopted for a wind project before because it is not required under federal law. Although wind energy across the nation kills dozens of golden eagles annually, the bird is not protected by the Endangered Species Act, which would require a conservation plan.

Instead, the Fish and Wildlife Service is acting under a relatively recent federal law, the Bald and Golden Eagle Protection Act, adopted in 2007. The law allows the service to issue so-called “take permits” that allow a developer to kill eagles in return for specific actions to benefit the species.

The law does not require developers to prepare conservation plans or obtain take permits. In fact, none has been issued before to any development project. But under the law, if a wind energy project is proved to have killed eagles, a company that has not sought a permit could be subject to criminal prosecution, resulting in fines and penalties.

“While there have been no prosecutions yet, it’s not a fair statement to say nothing is happening,” said Davis. “Investigations have been conducted on several of these take incidents ... and that activity is ongoing.”

Shiloh IV Wind Project LLC is a subsidiary of EDF Renewable Development Inc., based in San Diego. Rick Miller, director of wind business development for the company’s West region, said in a statement he hopes the plan results in no net loss of golden eagles.

“Our company pursued the permit based on our responsible development practices,” Miller said, “to minimize environmental impacts while generating zero-emissions energy.”

The company, the largest wind-energy operator in the Montezuma Hills region near Rio Vista, initially submitted a broader bird and bat protection plan to the Fish and Wildlife Service in 2011. The agency later persuaded the company to prepare a separate plan to protect golden eagles.

Garry George, renewable energy director at California Audubon, said more golden eagles are killed by wind

turbines in California than any other state. He praised the emergence of the first conservation plan to address the problem.

“It’s like a giant step forward by the service, and this developer is actually addressing the mortality of eagles in California,” George said.

The Shiloh IV project was actually completed in 2012. It involved replacing 230 smaller, older wind turbines with 50 larger ones. Each new turbine stands as tall as 415 feet with a rotor diameter of 305 feet. Each produces as much as 2 megawatts of electricity.

The newer turbines are proved to be a smaller threat to birds because the blades spin slower, allowing birds to see the spinning hazard before it kills them. But they still sometimes kill birds.

The Fish and Wildlife Service estimates the 50 new turbines will kill five golden eagles over five years, the duration of the proposed permit, which is two more than the company estimated. To atone for the dead eagles, Shiloh IV would be required to retrofit 133 power poles, owned by PG&E in Monterey County, to prevent golden eagles from being electrocuted when they perch on the poles.

All poles must be retrofitted in the first year of the five-year permit. The cost to retrofit each pole is estimated at \$4,500, or about \$600,000 for 133 poles.

Heather Beeler, an eagle permit specialist at the service, said this does not excuse PG&E from retrofitting other power poles it owns in the area.

“What this does is speed the process,” she said. “It’s in an area known to have dense eagle populations, and has had problems in the past.”

George said this kind of protection measure will help eagles. But he said it remains to be seen how effective it will be, and questioned why it is proposed so far away from the Shiloh IV site near Rio Vista. Juvenile golden eagles are known to disperse as far as 140 miles from the area where they were born, and the power pole retrofits will be at the very edge of a 140-mile radius from Montezuma Hills.

“We have some questions about how that’s actually going to affect regional populations of eagles,” George said. “I don’t know how you really figure out how many eagles didn’t hit your power pole.”

The company would also be required, once three eagles are killed, to install visible or audible deterrent measures to help eagles avoid turbine blades. Once a fourth eagle is killed, it would be required to modify turbine operations when eagles are present to avoid killing more.

These steps are not the most protective options the service identified. An alternative plan, which the service does not consider its “preferred” option, would require Shiloh IV to curtail turbine operations during daylight hours in June and July, and is predicted to kill one fewer eagle over the five-year permit term.

George said such seasonal turbine curtailments have been shown to reduce eagle deaths in the Altamont Pass wind energy area, and he wants to see such actions required in the plan.

Davis said the plan includes a trigger that requires the company to consult with the Fish and Wildlife Service if eagles are being killed at a faster rate than expected, and renew and amend the permit if necessary.

“Much will depend on how the first five years go,” he said. “We may learn that not as many eagles are taken as

we anticipated. Or they may reach the five (killed) at year three and need to come back for a permit renewal earlier. We'll cross that bridge when we get there."