Wind turbines taking toll on birds of prey

Thousands of deaths at site in Calif. spur group's lawsuit

By John Ritter
USA TODAY

ALTAMONT PASS, Calif. – The big turbines that stretch for miles along these rolling, grassy hills have churned out clean, renewable electricity for two decades in one of the nation's first big wind-power projects.

But for just as long, massive fiberglass blades on the more than 4,000 windmills have been churning up tens of thousands of birds that fly into them, including golden eagles, red-tailed hawks, burrowing owls and other raptors.

“Two decades of study but little progress reducing bird kills, environmentalists have sued to force turbine owners to take tough corrective measures, the companies, at risk of federal prosecution, say they see the need to protect birds. “Once we finally realized that this issue was really serious, that we had to solve it to move forward, we got religion,” says George Hardison, president of G3 Energy.

The size of the annual body count — conservatively put at 4,700 birds — is unique to this sprawling, 50-square-mile site in the Diablo Range between San Francisco and the agricultural Central Valley because it spans an international migratory bird route regulated by the federal government. The windmills are home to the highest density of nesting golden eagles.

Scientists don’t know whether the kills reduce overall bird populations but worry that turbines, added to other factors, could tip a species into decline. “They didn’t realize it at the time, but it was just a really bad place to build a wind farm,” says Grainger Hunt, an ecologist with the Peregrine Fund who has lived near Altamont across the USA — from Cape Cod to the Southern California desert — new wind projects, touted as emission-free options that will reduce fossil-fuel power plants, face resistance over wildlife, noise and vistas. The crashes come as wind-energy demand is growing, in part because 17 states have passed laws requiring their future energy — 20% in California by 2010 — come from renewable sources.

“We’ve been really clear all along, we absolutely support wind energy as long as facilities are appropriately sited,” says Jeff Miller, Bay Area wildlife coordinator for the Center for Biological Diversity, which took 12 companies to court.

Wind energy is a tiny but fast-growing share of U.S. energy — 0.4%, up from less than 0.1% five years ago. Since November, when Congress reinstated a key tax credit for wind producers, the industry is poised to expand by as much as a third this year, the American Wind Energy Association says.

In 2004, wind generated enough electricity to power 1.6 million households, the association says. Altamont’s turbines are the nation’s No. 2 producer. Few energy experts think environmental concerns will discourage wind development long-term because the tradeoff is too appealing.

“When you opt for wind turbines, you don’t opt for pollution that harms children and crops from fossil-fuel power plants,” says Dan Kammen, an energy professor at the University of California-Berkeley.

But windmills — derisively dubbed by some as “toilet brushes in the sky” — draw fire when they’re planned in areas prized for pristine landscapes:

Cape Cod groups are fighting what they call visual pollution from 130 turbines, each taller than the Statue of Liberty, sought for Nantucket Sound.

Fishermen fear loss of prime fishing grounds from the USA’s first offshore project.

Rep. Nick Rahall, D-WV, and the Government Accountability Office to study the effects more windmills would have.

In the Flint Hills of Kansas, Audubon Society worries that windmills could upset views in one of America’s few remaining stands of native tallgrass prairie and harm habitats of migrating prairie birds.

Acting Gov. Richard Codey last month ordered a 15-month wind-power moratorium on Ocean City and other sites.

Altamont Pass bird kills have been known for years, but turbine owners and federal regulators ignored them except to urge more research, says Miller of the Center for Biological Diversity. But a California Energy Commission study in August found bird fatalities much higher than

Potential killer: A flock of birds flies past a non-operating wind turbine in the hills of Altamont Pass in Alameda County, Calif. Turbines in the area have killed eagles, hawks and owls.

Turbine changes in the wind

Big wind turbines generate more than 40 times more electricity than smaller ones, reducing the number needed.

A comparison:

Enough power to light a state

The capacity of U.S. wind-power facilities has more than doubled since 2000. Current capacity is enough power to supply every household in Kentucky.

Number of typical U.S. households served:

<table>
<thead>
<tr>
<th>Year</th>
<th>No. of households</th>
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<tbody>
<tr>
<td>1982</td>
<td>302</td>
</tr>
<tr>
<td>1987</td>
<td>183,400</td>
</tr>
<tr>
<td>1992</td>
<td>297,200</td>
</tr>
<tr>
<td>1997</td>
<td>335,100</td>
</tr>
<tr>
<td>2004</td>
<td>1,683,000</td>
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</tbody>
</table>

Top five states

Number of typical U.S. households served:

<table>
<thead>
<tr>
<th>State</th>
<th>No. of households</th>
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</thead>
<tbody>
<tr>
<td>California</td>
<td>531,180</td>
</tr>
<tr>
<td>Texas</td>
<td>336,180</td>
</tr>
<tr>
<td>Minnesota</td>
<td>146,380</td>
</tr>
<tr>
<td>Iowa</td>
<td>122,460</td>
</tr>
<tr>
<td>Oregon</td>
<td>87,340</td>
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Source: American Wind Energy Association; G3 Energy

renewal, and the U.S. Fish and Wildlife Service decided to crack down. “Twenty years has just been too long to resolve this problem,” says Scott Heard, the agency’s chief Northern California enforcement agent. Fish and Wildlife can prosecute those responsible for kills under federal laws that protect eagles and migratory birds.

The center’s lawsuit was withdrawn but filed again in November because the wind companies’ bird-protection plan was “not a serious attempt,” Miller says. The center is appealing Alameda County’s approval of new permits.

The state study’s key recommendation would be costly for companies: replace old turbines with fewer, larger-capacity modern ones, relocate them away from favorite bird haunts and build them more than twice as high so blades rotate above the birds’ flight paths.

Environmentalists want 3-year permits that can be renewed only if companies show progress. The companies, citing financial pressures, have proposed at least 13-year permits and want their own timetable for installing new turbines.

Alameda County is trying to broker a deal. “We can’t put them out of business by telling them to take out all their old turbines,” says assistant planning director Steven Buckley.

Turbine owners say Altamont’s 4,000-plus windmills are outdated and eventually will be replaced by 1,000 or fewer new ones. G3 Energy, a small Altamont operator, is replacing 180 obsolete turbines with 35 larger ones.

Others are more cautious. FPL Energy, Altamont’s biggest operator with 2,000 turbines, wants the study’s findings tested — “Certainly the turbine owners hope fewer, taller turbines are better,” said FPL’s Steve Dierig.