

Putting more wind power on the grid

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Wind turbines tend to be overshadowed by solar power projects, which get most of the attention from the public and policymakers. That's the case again in a new government plan for renewable energy projects in the California desert. Though the wind industry shouldn't get all the land it wants, the desert master plan should provide more and better space for wind farms.

Despite its second-class status, wind is a much bigger producer of electricity than solar. According to the U.S. Energy Information Administration, wind is now the source of 3.5 percent of the nation's electricity supply. The U.S. Bureau of Land Management reports that wind has been the fastest-growing producer of electricity worldwide over the last decade, largely because better-designed turbines have reduced costs by 80 percent over the last 20 years, and it is poised for rapid expansion in coming decades. In Kern County, the wind industry is second only to oil as a source of tax revenue.

Solar, which gets all the glory, produces only 0.1 percent of our electricity, though that number is expected to grow exponentially in the near future. So why has wind been so invisible to all except those who happen to drive through a farm of rotating blades?

For one thing, after an early start in the 1980s, <u>wind farms</u> developed a deservedly bad reputation as death traps for birds, including protected species. One of the earliest wind farms, in the Altamont Pass outside Livermore, Calif., was built in an area favored by golden eagles and the ground squirrels on which they prey, with the spinning turbines between



the two. An estimated 4,700 birds were killed each year, including 70 to 110 golden eagles in any given year. A lawsuit resulted in an agreement to idle many of the turbines and to take other protective steps, and the killing of birds has since dropped by more than half.

The industry has been doing better lately. And when wind farms are carefully located to avoid sensitive habitat and bird migration routes, they are considered environmentally friendly enough to earn the support of the Audubon Society.

Yet the industry faces a new controversy in California, this time in the Mojave and Colorado deserts. As with solar energy, the issue has been how much of the fragile land can be dedicated to renewable, clean energy that will combat global warming, cut air pollution and reduce dependence on foreign oil. To determine the answers, an expansive effort has been underway since 2012, with government, environmental and industry leaders participating, to create the Desert Renewable Energy Conservation Plan for state and federal land in the desert. The plan is supposed to identify the areas most suited to new energy development: near transmission lines but away from the most environmentally sensitive areas. Projects within the favored development zones will go through a quicker, easier approval process.

The trade group for the wind industry, the California Wind Energy Association, takes exception to the most recent versions of the plan, saying too little land has been set aside for wind projects and in less than ideal wind-producing areas. The association is arguing for more flexibility so that companies can propose projects within large swaths of land, as long as they conduct the studies to show that the impact on the environment will be minimal.

The Audubon Society agrees that once again, wind is playing second fiddle to solar. Garry George, an official with Audubon California, says



that the zones where renewable energy development will get favored status were picked with the needs of solar in mind rather than wind.

But George rightly objects to the Wind Energy Association's proposal to leave it unclear where wind farms will be erected as long as the industry does the required wildlife studies. If that's allowed, what's the purpose of having a desert master plan?

The plan's developers should make more room for wind farms in areas that make sense for them. George says he has offered to work with the trade association on identifying the right places; the Audubon stamp of approval would certainly aid the industry's efforts. A 2008 federal study found that wind energy could serve 20 percent of the nation's electricity needs by 2030; government planners should help wind farms get there without, well, giving away the farm.

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