Wind power can work around birds

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PostedSunday, March 4, 2007
DELAWARE VOICE


Volunteers counted migratory hawks and other birds at Cape Henlopen State Park in November. News Journal file

Rising energy prices, national security concerns and global climate change have us all taking a hard look at energy options. One thing is painfully clear. We can't continue business as usual when it comes to how we use and produce energy.

Delaware Audubon believes energy conservation and efficiency improvements should be given first consideration, followed by aggressive deployment of alternative, renewable sources such as wind and solar energy.

In Delaware, there are currently three proposed electric power plant projects. Two rely on fossil fuels. The third project relies on wind energy, a renewable resource.

The environmental impacts associated with fossil fuel-fired power plants are well known: emissions of sulfur dioxides, nitrogen oxides, mercury, heavy metals, fine particulate matter and carbon dioxide. These emissions cause acid rain, aggravate asthma and other respiratory problem, result in premature death and cause global warming. They produce a variety of solid wastes from ash and scrubber sludge that contain hazardous substances.

Fossil-fuel plants require enormous amounts of cooling water, which kill or injure of millions of fish eggs, larvae and juvenile and adult fish as they pass through intake and discharge structures.

Coal mining is particularly destructive to the environment. About 60 percent of U.S. coal is stripped from surface mines. The rest comes from underground mines. Surface mining, especially mountaintop mining, dramatically alters the landscape and wastes are often dumped into valleys and streams.

In West Virginia, more than 300,000 acres of hardwood forests and 1,000 miles of streams have been destroyed by this barbaric practice. The destruction of forests also contributes to global warming, erosion and flooding.

Wind energy has no emissions of harmful pollutants and no impacts from mining, transporting or storing fuel, and no waste ash or scrubber sludge.

There is concern about wind energy's impact on birds and bats. One well-known wind farm is located in Altamont Pass, a major bird flyway in northern California. This wind farm was built in the 1970s in response to the Arab oil embargo. According to the Center for Biological Diversity, wind turbines at Altamont Pass kill more birds of prey than any other wind facility in North America.

No real consideration was given to the impact of the Altamont Pass wind farm when it was constructed more than 30 years ago. This experience is a constant reminder to the wind energy industry of the importance of proper siting.

Although the CBD is concerned about the impact of wind turbines on birds, it believes we can have wind energy without decimating imperiled wildlife populations.

Pick the right site

According to the center, "Conservationists support the development of clean energy as an alternative to fossil fuel power plants, but impacts to wildlife should be reduced wherever possible. Potential sites for new wind energy projects should be reviewed for bird abundance, migration and use patterns, and wind farms should be designed and operated to prevent or minimize bird mortality."

Similarly, the National Audubon Society and Delaware Audubon believe that impacts from wind energy facilities can be minimized through proper siting and operation.

Denmark has the greatest experience with offshore wind farms. That country currently derives 20 percent of its electrical generating capacity from wind energy. A November report issued by the Danish Energy Authority, the Danish Forest and Nature Agency and two European energy companies concluded that:

"The comprehensive environmental monitoring programs of Horns Rev Offshore Wind Farm and Nysted Offshore Wind Farm confirm that, under the right conditions, even big wind energy farms pose low risks to birds, mammals and fish."

With regard to birds specifically, the monitoring program showed, "Of 235,000 common eiders passing Nysted each autumn, predicted collision rates were .02 percent (45 birds). This low magnitude was confirmed by the fact that no collisions were observed by infra-red monitoring."

The impacts on birds, bats, wildlife and aquatic species from wind energy pale in comparison to the ecological destruction and degradation associated with production and use of fossil fuels. Climate change alone will result in species dislocation, including the human species, and extinction.

When one considers the public health benefits of wind energy compared to fossil fuels, the choice of alternatives is obvious.

As National Audubon Society President John Flicker stated recently, "Global warming creates a sense of urgency beyond anything we have seen before. Increasing temperatures caused in part by our excessive use of fossil fuels are affecting habitat and food sources for birds, and may provide the ultimate blow to many species that are already under stress. I want to make sure Audubon is doing everything we can to promote both conservation and properly sited wind energy."

Some scientists believe we have around 40 to 50 years to reduce our contributions of greenhouse gases to the atmosphere and avoid large-scale impacts of climate change and sea level rise. Energy decisions we make today will affect our ability to address this problem. Delaware is in a unique position to lead the nation in shifting to non-polluting, renewable energy by selecting offshore wind energy.

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