



**BY JEFF TITTEL AND KARA SEYMOUR**

**NEW JERSEY SIERRA CLUB**

**COMMENTARY**

As the U.S. Department of Interior's Mineral Management Service begins to outline Thursday, June 11 at Monmouth University the regulatory framework for developing renewable energy activities on the Outer Continental Shelf, the New Jersey Sierra Club is urging officials to establish a simple and straightforward permitting process for offshore wind farms.

Because offshore wind is the most viable and cost-effective form of renewable energy, we must make it easy to construct and implement.

Now, more than ever, New Jersey needs renewable energy sources. With proposals on the table to construct another coal plant and a giant power line that will import dirty coal power from Pennsylvania, it is evident we will not meet our goals of reducing emissions if we continue to use fossil fuels to generate power. The New Jersey Sierra Club believes permitting should be made easier to allow for scientific studies that will aid in determining locations of future wind farms. As part of any environmental analysis relating to the construction of wind turbines, risk should be considered as well as the concept of avoidance. We should develop an overall plan for wind farms off our coasts. Areas where there is suitable wind and little environmental impact should be subject to a quicker permitting system.

When determining the best locations for offshore wind farms, environmental analyses should be done in a timely manner and take into account the impact that entire wind farms, not just individual turbines, will have on the surrounding natural resources. Turbines should be constructed in locations that have the highest and most consistent wind levels and will have the least impact on the ecosystem.

When studying the impact wind farms will have on migratory birds, we must take into consideration the concept of avoidance and we must weigh the impacts that global warming will have on the ecosystem if we continue down the path of a fossil fuel based energy system. We have to look at the big picture and realize that a drastic rise in sea levels, something that will inevitably happen if we do not invest in renewable energy such as wind, will be far more devastating to birds than wind farms."

If the Mid-Atlantic coast region harnessed the full capability of the wind, it could generate more than enough energy in a clean, environmentally safe way. The area from Massachusetts to North Carolina has the potential to generate a yearly average of 330 gigawatts (GW) of electric power, nearly five times the 73 GW average demand of this region.

New Jersey has passed legislation that establishes renewable energy targets of 30 percent by 2020. "If we want to meet these goals and begin winning the fight against global warming, we must move aggressively towards renewable energy sources. offshore wind has enormous potential off the Atlantic Coast and it is essential we move quickly to tap into that resource.

Not only is offshore wind clean power, in the long run, it is more economical and not subject to price volatility. Construction costs have soared for conventional power plants, and their fuel prices have increased under pressure from growing worldwide demand. Construction of an offshore wind farm currently costs only 30% more than a conventional coal plant for the same rated power capacity, and the "fuel" for a wind farm is free. Over the 25-year projected power plant life, using the same range of volatility that coal prices have exhibited in the past year (ranging from \$55 to \$145 per ton), wind is the better investment.

Wind power is also cheaper than nuclear. A current proposal in Maryland to construct a 1500 MW power plant has a total cost estimated at \$20 billion. We could build a 3000 MW wind farm off New Jersey's coast for approximately \$9 to \$10 billion. The cost of operating a nuclear power plant is about 30 times greater than the cost of maintaining and operating windmills.

The economic advantages of offshore wind are even greater when job benefits are considered. Construction, installation, operation and maintenance require a skilled labor force that can be hired and trained locally. Many of the components of wind turbines can also be fabricated locally, taking advantage of NJ strong maritime and industrial base.

Wind power is also located where the demand is. Most major cities of the eastern U.S. are relatively near the coast. Offshore wind farms can provide power to these load centers without requiring long distance transmission lines. Here in New Jersey, a wind farm 15 miles off our coast could easily be integrated into the region's high voltage transmission system. This means that we would not need new transmission lines that cut through our parks and environmentally sensitive areas to bring dirty power from other places.

Offshore technology is well-established worldwide, with offshore wind farms in ten countries, totaling more than 1,130 megawatts (MW). U.S. offshore projects are moving ahead in six other Atlantic states. New Jersey has recently approved a 350 MW project off our coast and is in the process of releasing grant money to create offshore windmills that would generate up to 1050 MW. Delaware has recently approved a 450 MW wind farm 11.5 miles off its coast, and a 420 MW wind farm in Nantucket Sound off the southern coast of Massachusetts has nearly completed federal review. Rhode Island recently awarded projects of 400 MW. New York and Georgia also are studying offshore project sites for near-term development.

Establishing clean energy offshore wind farms will help put America on the path towards energy independence while creating thousands of new, green jobs. We must not place unnecessary hurdles in the way of moving America towards a clean energy future.

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