



Position Statement

Industrial, Off-shore Wind Power—a Costly Diversion

New Jersey's coastal waters are rich in natural resources and are used extensively by the public. They are habitat for numerous species of finfish and shellfish, sea turtles, marine mammals and birds. Public uses include recreational and commercial fishing, boating, surfing, and divers exploring historic shipwrecks and artificial reefs. New Jersey's beaches are the foundation for the State's second-largest economic sector: tourism. The views from the Jersey Shore are among the few places in the state where there are no built structures cluttering the "seascape", providing an irreplaceable open space experience. They are also public waters – held in trust by the state and federal governments for the public. This use of the ocean and coast by the public is an important part of our culture in New Jersey. It provides many benefits to us, and has in the past been threatened by unwise industrial uses.

Offshore wind turbine facilities have the potential to affect a broad range of resources and ocean uses. Increasing demands to use our coastal waters for offshore windmills and other industrial uses has led the Society to study how this would affect what is valuable and important to us including how it would affect the natural life of the coast and our traditional uses of the nearshore waters. We have looked at this issue, and we have concerns.

The American Littoral Society's concerns about the impact and appropriateness of building industrial-scale, offshore wind facilities in no way indicate a disregard for the critical issue of global climate change or that we are not constructively working to address the issue. In fact, quite the opposite is true: We participated as an *amicus curiae* (friend of the court) in the successful lawsuit before the U.S. Supreme Court against the Bush administration's refusal to regulate carbon dioxide as a pollutant; we have conducted research on the impacts of sea level rise on coastal habitats which is currently being used by the USEPA and NJDEP to develop programs to protect those resources; and we are supporters of NJ legislation, "The Global Warming Response Act" which calls for mandatory reductions in emissions.

We are concerned about the potential benefits from offshore wind as compared to its impacts on ocean and coastal resources and traditional uses of the ocean and that the enormous amount of public funding needed by offshore wind might be used more effectively to reduce emissions through other means, primarily conservation. Our concerns fall into three categories: potential impacts to living resources and traditional uses of the ocean; plans to erect large off-shore facilities without proper testing and evaluation; and evidence that off-shore wind power will not measurably reverse global warming.

The NJ Blue Ribbon Panel on Offshore Wind Turbines (of which the American Littoral Society was a member) concluded that offshore wind could significantly impact living resources as well as traditional uses of the ocean like commercial and recreational fishing and tourism. It also concluded that offshore wind would likely only make a small contribution to offsetting greenhouse gas emissions and, because of the intermittent nature of wind (NJ wind doesn't blow when peak electricity demand is highest), it would not replace current "base load" generation such as fossil fuel powered or nuclear plants. Further studies have shown that, because of our grid system approach to electricity distribution, those "dirty" plants must always remain online as backups to wind power to maintain reliable delivery of electricity.

Wind turbines are inherently inefficient (they don't produce a lot of electricity) and therefore many individual turbines are needed to produce any substantial amount of energy. For wind power to meet New Jersey's goal to produce 20% of the state's electricity from renewable sources, we would need to site several thousand windmills within 6-15 miles of the coast. This would clearly create enormous conflicts with migratory birds, whales, fisheries and other uses of the ocean space that these wind turbines would displace. The European experience is showing an increasing tendency toward making the wind farms "exclusion zones" for a variety of reasons, resulting in public ocean space being given over to utilities.

These negative impacts to ocean resources might be acceptable if they were being traded for a significant impact on global climate change; however, a recent study by the National Academy of Sciences on wind farms concluded that wind power might help slow the rate of increase of some greenhouse gases, but wouldn't result in a decrease in the amount of CO2 (NYT, 5.04.07 "Wind Farms May not Lower Air Pollution, Study Suggests").

These facts led the Society to look at other methods of reducing greenhouse gasses, particularly through conservation and energy efficiency. The Governor's Blue Ribbon Panel concluded that there were over 8,000 MW of potential energy to be gained through these approaches—twice the Renewable Energy Goal set for New Jersey.

Finally, there is the question of where our leaders should invest public money to reduce greenhouse gasses. Offshore wind farms are tremendously expensive: the Cape Wind project off Cape Cod is estimated to cost \$1.6 billion to construct; a current proposal in Delaware is estimated at \$2 billion. That construction is dependent upon public tax credits to make the economic model work: the public subsidy was estimated in the Wall Street Journal to be \$72 million a year, passed on to consumers as higher electricity rates. While we don't categorically dispute the use of subsidies to promote public interests, in this case we must raise the question, how can we get the most bang for our bucks?

Our research has shown that there are other ways to achieve the same or better results for a lot less money. For example, recently, several New Jersey industrial plants converted to a co-generation model in which they harness the steam produced as an industrial by-product and use it to generate electricity. These plants reduced their electrical demand by 660MW – almost twice the proposed generation capacity of a proposed "pilot" offshore wind project being considered by the Corzine Administration. This investment in conservation reduces greenhouse gasses and produces a surplus of electricity for use elsewhere. We advocate exploring these types of strategies before offshore wind, the benefits of which have not been proven.

Even so, the Corzine Administration is moving forward with plans to construct a pilot industrial

offshore wind facility that is larger than any operating facility in the world without completing the natural resource baseline studies proposed not only by the NJ Blue Ribbon Panel, but also by the Department of Environmental Protection. Neither is the administration waiting for completion of economic evaluations regarding impacts to shore tourism, commercial and recreational fishing industries and other ocean uses currently being solicited by the Department of Commerce. The Administration has rejected important safeguards (both substantive and procedural) developed to counterbalance the lack of scientific studies of potential for serious harm to New Jersey's coast from offshore wind development.

Even pro-wind advocates have supported need for resource studies and protective criteria to guide the evaluation of overall policy and siting of facilities; European programs, held up as evidence of no harm to offshore and coastal resources or as demonstrations that the technology is "proven," were built on extensive, comprehensive studies preceding any proposals to site facilities – test or otherwise. The need for such preliminary work is also considered fundamental to the overall success of offshore wind programs and legitimate, reasoned policy.

Wind turbines have become icons for our ability to deal with global warming despite clear evidence of their limited ability to mitigate it. Energy companies, turbine manufacturers and a large portion of the environmental sector have embraced off-shore wind power as a panacea for global warming, generating a political momentum that cannot (or will not) stop to consider good policy. All the while, this dash toward wind has diverted attention from the difficult and politically distasteful changes we must make to the houses we live in, the cars we drive, the food we eat, and just about every other aspect of the way we live, challenges which are truly at the root of addressing global climate change. This is a dangerous diversion that not only puts already stressed coastal resources and public money at risk, but also risks postponing the more difficult actions we need to take to reverse global warming past the point of no return.