

## MASSACHUSETTS WIND FARM ETHICS CASE

Recently Cape Wind Associates LLC of Boston, a private investment group with several undisclosed members, has proposed building the United States' first offshore wind farm on Horseshoe Shoal in Nantucket Sound, off the coast of Cape Cod in Massachusetts and near the two islands of Martha's Vineyard and Nantucket. At peak production the wind farm would crank out 420 megawatts – enough to power about half a million homes, and based on historical wind data for the area, on average the wind farm should generate half of the electricity used by Cape Cod and the islands.

Since there are no specific siting standards for off-shore wind facilities, many groups and agencies are currently reviewing the proposal from their own perspectives and standards, e.g., US Army Corps of Engineers, US Coast Guard, Federal Aviation Administration, Massachusetts Energy Facilities Siting Board, Massachusetts Executive Office of Environmental Affairs, Massachusetts Office of Coastal Zone Management and the Cape Cod Commission. Assume that you are employed by a group of consulting engineers (CUConsultants, Inc.) who have been hired by Cape Wind Associates to conduct additional studies of the proposal, which they tell you they intend to use to support their proposal

At the end of your review, your analysis of easily quantified factors (for example, initial investment compared to other energy technologies, per unit price of the electricity, environmental factors such as CO<sub>2</sub> emissions, etc.) tends to support the proposal, but your analysis of less easily quantified and non-quantified factors (for example, negative impact on tourism, loss of aesthetic quality of life, etc.) tends not to support the proposal. During your preliminary oral report about your results, Cape Wind Associates asks you to leave the latter out of your written report because “they are soft and will only cloud and confuse the issue.” What is the ethical thing for you to do?

## FINAL REPORT TEMPLATE – CONSIDERATION OF THE CAPE WIND FARM<sup>1</sup>

### BACKGROUND

Europe is making extensive use of wind power. For example, Denmark generates 5 percent of its energy needs using wind power, and Germany and Sweden are close behind. By 2020 Denmark expects to generate 50 percent of its power demands using wind. Recently, Ireland has approved plans to build the world's largest wind farm on a sandbank just six miles offshore from Arklow, a town about 40 miles south of Dublin. The Arklow Sandbank is one of the windiest locations in Ireland and will seat 200 wind turbines. The wind farm will be capable of generating 520 megawatts of electricity, which will be about 10 percent of the country's energy needs by the time the project is complete. Europe's extensive implementation of wind energy is driven by a mixture of environmental and economic concerns: it is both emission-free and renewable; it reduces reliance on oil imports; and European governments provide substantial subsidies for wind energy.

The development of wind energy in the United States is less extensive than in Europe; currently only about 1% of the United States' energy needs are supplied by wind. Interest in wind energy in the United States is growing, however, in spite of the fact that government subsidies favor coal and gas, and last year \$1.7 billion was spent installing wind energy equipment in the US. Wind patterns have caused most of the US's current wind energy capacity to be installed in western and Great Plains wind fields, and some experts have noted that creating a power grid of transmission lines to carry wind-generated power from these sites to Eastern populations centers would be an expensive proposition.

### THE CAPE PROPOSAL

Recently Cape Wind Associates LLC of Boston, a private investment group with several undisclosed members, has proposed building the United States' first offshore wind farm on Horseshoe Shoal in Nantucket Sound, off the coast of Cape Cod in Massachusetts. At peak production the wind farm would crank out 420 megawatts – enough to power about half a million homes. Contrary to the European experience, however, this proposal has stirred up considerable controversy.

- Critics note that the 170 wind turbines – each 426 feet tall – will be visible for 26 miles, and the proposed site – only 5 miles off-shore – will make the turbines clearly visible from Martha's Vineyard and Nantucket Island, thus destroying the scenic beauty that is a major basis of the region's tourist industry. The 680 navigation lights on the turbines will make them even more visible at night. (<http://www.saveoursound.org/>)
- Critics also note that tall towers, such as those represented by the turbines, represent a

---

<sup>1</sup> Compiled from several public domain sources. My thanks to Professor Morton Isaacson for calling this case to my attention.

