

APPENDIX F

The Impact of Views on Property Values

Widely varying opinions have been expressed about the potential impact of windfarms on the value of nearby property. For example, the proposed (now cancelled) Addison Wind Farm in Wisconsin became controversial, in part, over allegations about property values. Opponents argued that property values would depreciate significantly if the wind farm were built (Don Behm, 2001). On the other hand, RENEW Wisconsin quoted several persons representing the real estate industry in other places in Wisconsin and Iowa where wind projects had been built, saying that such projects had no impact on property values (RENEW Wisconsin, 2000).

The issue of impacts on property values cannot be divorced from the broader issue of public attitudes toward windfarms. Righter discusses attitudes toward windfarms in his *Wind Energy in America* (Righter, 1996). He notes that much of the general perception of windmills in some parts of this country is influenced by the problems and failures of early efforts which damaged the reputation of windmills. Examples he cites include Palm Springs, California (pp. 228-234), Altamont Hills, east of Livermore, California (pp. 240-251), Livingston, Montana (pp. 251-259), and Hawaii (pp. 260-263).

A paper presented to the 20th British Wind Energy Association Conference gave an overview of some public opinion surveys (Freris, 1998). Conclusions from these surveys were that generally a high percentage of residents support the development of windfarms and that the level of support increases after a windfarm has been in operation. The author, a representative of the wind power industry, draws the following conclusions:

- The overwhelming majority of respondents support the principle of development of wind power in the UK, and they also support their local windfarm.
- Those with direct experience of an operating windfarm are more supportive and positive than those without such experience.
- Once windfarms are in operation, concerns about noise and visual impact reduce.
- The majority of people find the windfarms acceptable in the landscape and more find the turbines graceful than ugly.
- A strong majority support and a small minority oppose windfarms, with more expressing no opinion than opposition.

None of the above, however, takes into account the specific local setting and the individual's proximity to and view of the windfarm. Righter (1996) (p. 240) concluded that many who do not have a negative attitude toward wind power in general will oppose a site within five miles of their home. While this statement is probably too simplistic, it does capture the essence of the conflict that many people have regarding this and similar issues. The real issue here is similar to the 'not in my back yard' (NIMBY) phenomenon, but is perhaps a little more subtle and refined. As discussed by Righter (1996) (pp. 238-239), it is a conflict between the macro-scale and the micro-scale. Many people are supportive of wind power and other alternative energy sources because of such concerns as global warming and air pollution—the macro-scale. At the same time, however, they may have concerns about the impacts of proposed projects because of their potential to disturb their immediate environment—the micro-scale. This disturbance might take the form of visual changes to the landscape or noise intrusion, and could, if significant enough, have negative impacts on property values. For example, much of the opposition to a proposal to construct a windfarm at Tejon Pass in California (Righter, 1996) (pp. 236-238) was based on concern that visual blight would ruin the "freeway experience" through Tejon Pass and also ruin a favorite wildflower area. These local concerns won over much of the environmental community, in spite of the prospect of clean energy for forty thousand homes in one of the worst polluted regions of the country. In contrast, a windfarm west of Rio Vista, California was installed with relatively little

opposition (Righter, 1996) (p. 240). The location chosen was remote, located at least 15 miles from the nearest interstate highways and the city of Fairfield.

Similar conclusions were reached by Damborg and Krohn of the Danish Wind Industry Association (Damborg and Krohn). However, they highlighted the role of attitudes toward the developer, local decision makers, and the decision process. They argue that all of these have a significant influence on public attitude toward a windfarm (or any other) project, and that a participative approach in the siting procedure will decrease resistance and improve public attitude toward a project. They do cite one study done in Denmark (by Andersen, 1997, in the municipality of Sydthy) that suggests that people living closer than 500 meters to the nearest wind turbine tend to view them more favorably than do those living farther away, and that noise and visual impacts are not generally considered to be significant concerns by those living nearby.

Few studies have been located dealing specifically with the impact of a windfarm on property values. A study is now underway in Wisconsin, involving the Energy Center of Wisconsin and the Wisconsin Division of Energy, among others. However, the results of this study are not expected to be available before June, 2002, at the earliest. One study in Denmark did include this issue in its analysis (Munksgaard and Larsen, 1996). A survey conducted for this study found that 13 percent of the people who lived near the windmill installations considered them to be a nuisance. Analysis of property value impacts showed a decrease in housing prices of DKK 16,200 for a single windmill and DKK 94,000 for a windfarm of 12 windmills. No overall housing prices were given, so this cannot be translated into percentage terms. However, exchange rates for 1995 (the study was conducted from 1994 to 1996) suggest these impacts ranged from about \$2,900 to \$16,800.

Other research related to property values, but not specific to windfarms, may also be useful in understanding these impacts. Studies on the relationship of views and property values show that desirable views do have a positive value on property values. For example, a study by Rodriguez and Sirmans (Rodriguez and Sirmans, 1994), based on data from Fairfax County, Virginia, found that a good view added about 8 percent to the market value of a home. Another study, looking at vacant property on Seabrook Island, off the South Carolina coast, found that views had significant impacts on the value of the property (Rinehart and Pompe, 1999). An ocean view added 147 percent to the market value of a lot (vacant lot, not a home), view of a creek or marsh, 115 percent, and a golf course view, 39 percent. Similar results have been found for the impacts of other environmental amenities, such as open space, proximity to recreational trails, and improved coastal wetlands (Bradec, 1992; Brabec and Kirby, 1992; Earnhart, 2001).

These studies are consistent with the expectation of some negative impact on property values from a windfarm that has significant negative visual impacts. However, they suggest a much smaller impact on a home than 40 to 60 percent decline asserted in comments received on the Draft EA. Nevertheless, it is possible that in specific cases, impacts would be greater than the range shown by the studies cited, but there appears to be no research to validate general claims of such large impacts.