Glenn--

Attached is a review of the REPP Study that I did last year. Like the other studies, it suffers from several flaws and limited resources. It is difficult to isolate the effect of wind turbine on property values alone since several other factors (interest rates, local economy, population trends, etc..) also have significant effects on property values. You would think that the government could support a more comprehensive look at the subject. Perhaps they are concerned about the outcome.

Tom Hewson

Date: Wed, 05 Nov 2003 13:48:41 -0500
To: "Daniel Mackay" <dmackay@preservenys.org>
From: Tom Hewson <hewson@evainc.com>
Subject: Re: Best Practices - Wind Energy Siting Guidelines

Dear Mr. Mackay--

I'm an energy consultant that has done some work on reviewing proposed wind projects for citizen groups and utilities.

I did review of the AWEA report on property values that was done by REPP. The report was written under a "small" DOE grant that significantly limited REPP on what they could do. The author mentioned that they collected sufficient data in only 9-10 locations (each >10 MW) of the 26-30 sites in the survey. They focused their efforts on properties within 5 mile area. Given that some prior studies found more significant impacts much closer than 5 miles, I asked why such a large area was selected. He mentioned that given the buffering areas that there would be much fewer data points if they used an alternate criteria such as 1 mile.

REPP also mentioned:

- All assessors were very positive about wind power
- Some areas disposed of their sales records within 2 years or were notin electronic form to they were unavailable for the study.
- Some people wanted property near wind farms as a speculation play tooffer additional wind sites to developers.
- Many areas were so remote that the few maintenance jobs offered wereattractive
- In one Minnesota area, he mentioned people moved into areas withWTG's because they offered a larger tax base to fund schools.

The REPP study was brought up by the wind developers during public meetings in Michigan to support their contention that wind projects do not

devalue local property values. However, you are correct that it is but one of a few studies that cover this issue. There are other studies that have come to different conclusions. All studies have flaws and it will remain difficult to isolate the property value changes to just one factor. A quick summary of the studies I have seen:

Studies Concluding Wind Turbines Devalue Local Property Values

- 2001-02 Lincoln Township WI study comparing property salesprices to assessed values before and after wind farm construction.Assessor reported that property sales (vs. 2001 assessed values) declinedby 26% within 1 mile and by 18 % > 1 mile of its wind farm project.However, study includes related party transactions. Moratorium Committee survey of County residents reported 74% of respondents would not build/buy within π mile, 61% within ∏ mile and 59% within 2 miles of wind farm.
- May 2000 County Guardian article *Case Against Windfarms.*Observations of English surveyors concluding wind turbines significantly decrease property values by as much as 30%.
- 1996 Danish report *Social Assessment of Wind Power-VisualEffect and Noise from Windmills- Quantifying and Valuation* contained survey of 342 people living close to wind mills. Survey found 13% of people surveyed considered wind mills a nuisance and would be willing to pay 982 DKK per year to have them leave. Survey of house sale prices showed 16,200 DKK lower price near single windmills and 94,000 DKK lower price near wind farms versus similar houses located in other areas.
- Assessed values did decline significantly for properties adjoiningMackinaw City WTG after it started operation.

Studies Concluding Wind Turbines Do Not Devalue Local Property Values

- 2002 Kittitas Valley Washington study by ECONorthwest Telephonesurvey of tax assessors views only. Conclude no adverse property impacts.No data provided to support position.
- May 2003 Renewable Energy Policy Report examines property values inareas within 5 miles of surrounding 9 large wind farms. Concludespresence of commercial scale wind turbines does not appear to harmproperty values.Uncertain about methodology used.

The issue simply comes down to nuisance and aesthetics. If the project creates a nuisance (noise, shadow flicker, TV/cell phone interference, radar interference), it can cause lower property values to adversely affected areas. People can simply apply their own personal evaluation criteria to determine the extent of the property change. What would it be worth to you? Generally, the bigger the nuisance, the larger the

devaluation. Localities can minimize nuisances from wind projects by setting minimum setbacks, proper location siting and noise limits. My concern with the REPP study is that it doesn't try to examine the nuisance effect by selecting a large 5 mile area.

Aesthetics are much harder to assess and to regulate since people have very different tastes. One needs only look at the new housing construction market. It is very difficult for a community to stop a new house construction project just because another person thinks it is ugly.

There are some sample local zoning ordinances that you can get from Cathy Lawton that may help you in your quest.

Hope this helps. As mentioned below, your effort is timely.

Tom Hewson
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