

MATUREN & ASSOCIATES, INC.
Real Estate Appraisers – Consultants
1125 E. Milham Avenue
Portage, Michigan 49002
269-342-4800

DT: July 17, 2005

TO: Michigan Wind Working Group
c/o John Sarver, Energy Office

RE: Impact of Wind Turbine Generators on Property Values

First of all I wish to thank you for including me in your email distribution list relative to the proceedings of the Wind Working Group. I have an interest in the topic as a Kalamazoo County Commissioner concerned with land use and regulation and as real estate appraiser interested in the issue of external obsolescence (loss or depreciation to property value from outside the property boundary). That economic obsolescence can come from adverse (nuisance) impacts such as visual (loss of viewshed), blade flicker (strobe effect), noise, ice throw from blades in winter, and other environmental impacts from ancillary installations. I am not aware of any plans to put a wind farm in the vicinity of any property that I own, so I have no personal interest one way or the other in this matter, other than wanting the rights all parties to be respected and protected.

I understand that you have as an item of discussion at your September 9, 2004 meeting the issue of property values. I have had some experience with research on this matter. Unfortunately, I have a prior commitment that day and will likely not be able to attend your meeting. Perhaps your committee is already aware of these valuation issues and studies, but I think that they are important to note in the context of promoting wind farms in our state. As the Vice Chair of the International Right of Way Association's Valuation Committee, I had the opportunity to moderate a session at our International Education Conference in Philadelphia this June. I invited the authors of the two most often quoted studies on the issue of wind farms and property values. Fred Beck of the Renewable Energy Policy Project (REPP) and Dr. David Tuerck of the Beacon Hill Institute at Suffolk College both presented the findings of their respective studies. Both studies are available on the internet: www.repp.org and www.beaconhill.org.

The REPP study, The Effect of Wind Development on Local Property Values, is a 78 page report which was published in May 2003. They studied 10 areas of the country. The study surveyed assessed values and properties within 5 miles of a wind farm and showed no diminution in value to those properties due to the presence of the wind farms. Critiques have been made regarding the methodology used in that study.

The Beacon Hill Institute issued an initial 53 page report in October 2003 - Blowing in the Wind: Offshore Wind and the Cape Cod Economy and a follow up 34 page report in March 2004 - Free but Costly: An Economic Analysis of a Wind Farm in Nantucket Sound. The studies focus on Nantucket Sound in Massachusetts relative to the Cape Wind Associates proposed 130 wind turbine generator (WTG) offshore wind farm. The 2003 study projected 1) a small decline in tourism resulting in a loss of 1,173 to 2,533 jobs and 2) a decline in property values of 4.6% (10.9% for waterfront property) or \$1.35 billion and a concomitant loss in tax revenue to the area of \$8 million. Criticisms of that report have also been made.

The Tennessee Valley Authority (TVA) study on a proposed wind farm in Tennessee consisting of 13 to 16 WTGs reviewed literature on the issue. Appendix F of the study cites several studies on wind farms and their impacts. Among those are:

1. The April 1996 Danish study: Social Assessment of Windpower – Visual Effect and Noise from Windmills – Quantifying and Evaluation. It concluded that 13% of people living near windmills considered them a nuisance. Property values showed a loss in housing prices from \$2,900 (for one WTG) to \$16,000 (for a 12 unit wind farm).
2. The ongoing study in Wisconsin thought to be done in 2003. My conversation with Steve Brick of the Energy Center of Wisconsin indicated that as of this Spring their study was not finished.
3. The TVA study does mention the value of a viewshed as a percentage of the value of improved property at 8% in Fairfax, Virginia and a South Carolina analysis regarding vacant lot premiums of 147% for an ocean view, 115% for a creek or marsh view, and 39% for a golf course view.

The 2002 Strutt & Parker study of the Edinbane Windfarm on the Isle of Skye notes that the proposed 41 turbines would have a major impact on the locality. They estimated that nearby property values would decline by over \$1 million. They also note at 6.18 of their report that "In Germany, Estate Agents report diminution in values of between 20% to 30% for properties in sight of wind farms. We understand that FPD Savills have reported similar levels of depreciation for properties in Norfolk."

The report of the Township of Lincoln Wind Turbine Moratorium Committee, Kewaunee, Wisconsin (2000 to 2002) notes that the Town of Lincoln building inspector compiled a list of home sales. The list compared the property's selling price as a function of the distance to an existing 22 WTG farm in the area. His conclusions were 1) Sales within 1 mile of the wind farm prior to the installation were 104% of the assessed values and properties selling after the wind farm introduction in the same area were at 78% of the assessed value.

Anecdotal evidence from real estate agents near Victoria, Australia indicate a 20% to 30% decrease in property values for homes near WTGs.

A court case referenced in the February 14, 2004 edition of the Daily Telegraph (UK) refers to a house near Askam in the Lakes District. The buyers were not informed of the pending installation of 4 WTGs which were 360' tall and 550 yards from their new home. No mention was made in the seller's disclosure form, despite the fact that the seller had protested the proposed wind farm installation to the local government indicating a large loss in value to their property. The court, after listening to chartered surveyors (appraisers) for both sides, concluded that the property had suffered a 20% decline in value.

The above listing is not exhaustive, but a brief mention of studies that discuss the impact on communities and nearby property values by WTGs.

Is the "jury" still out on the impact of WTGs on property value? Yes, though there do appear to be several indications that a loss in value to neighboring properties is real possibility. Can any state agency conclude that wind farms do not have the potential for causing a nuisance and devalue nearby properties and cause a "taking"? No. Whatever report the Wind Working Group comes up with, it should be informational only, include the differing opinions that are out there, not be used to usurp local land use authority in regulating WTGs just like any other land use nor to deny property owners their rights. In our quest for "energy independence" for our society in general, let us not forget the potential for economic loss to individuals as an unintended consequence. We should be prepared to compensate adjacent owners for any property rights (value) taken as a result of the introduction of wind farms.

Appropriate setbacks and location may mitigate many of the impacts of WTGs on adjacent properties. From what I see in your Draft #5, the recommended distance appears to be insufficient. That discussion, however, is beyond the scope of this communication.

Sincerely,

David C. Maturen, SRWA
Certified General Real Estate Appraiser
Kalamazoo County Commissioner

Denied Assessed Value Changed From: 102,100 To: 96,000

Order of Vote - Board or Three Member Committee of Board
Person: YES NO | Member: Robert McConally YES NO | Member: Katie Pagant YES NO

Reason For Board Action:
Noise from 2 wind generating systems to the South West of home

TENTATIVE TAXABLE VALUE (Disposition by Board of Review.) The Board of Review Must state the reason for its action below.

Denied Tentative Taxable Value Changed From: _____ To: _____

Order of Vote - Board or Three Member Committee of Board
Person: YES NO | Member: YES NO | Member: YES NO

Reason For Board Action:

CLASSIFICATION (Disposition by Board of Review.) The Board of Review Must state the reason for its action below.

Denied Classification Changed From: _____ To: _____

Order of Vote - Board or Three Member Committee of Board
Person: YES NO | Member: YES NO | Member: YES NO

Reason For Board Action:

UNIFIED AGRICULTURAL PROPERTY EXEMPTION (Disposition by Board of Review.) The Board of Review Must state the reason for its action below.

Exemption Request Denied Exemption Modified From: _____ % To: _____ %

Order of Vote - Board or Three Member Committee of Board
Person: YES NO | Member: YES NO | Member: YES NO

Reason For Board Action:

JOURNAL OF BOARD OF REVIEW
Date
Secretary Board of Review
Ch H Pagant 3-12-02

'Wind turbines made our home unsellable'

By Sharen Green

A COUPLE say they are trapped in their unsellable home because giant wind turbines will soon be towering over it.

Bob and Sue Firth put their five-bedroomed luxury house in Anderson, near Blandford, on the market in the summer.

Though several people expressed an interest, no-one ever came back for a second look.

The Firths discovered that two energy companies were applying for permission to build wind farms in the area - one at Winterborne Zelston and another at Muston Down at Winterborne Kingston.

Mr Firth said: "We had people coming round they all loved it but nobody came back for a second view."

Mr Firth asked the agent what was wrong and was told there were rumours - which proved to be true - that wind farms could be going up close by.



ANGRY: Bob and Sue Firth claim that the proposed wind turbines have put off prospective buyers

"We left the house on for the summer and autumn but the house really is unsellable and a neighbour up the road

can't sell his," said Mr Firth.

"It's caused enormous anger among villagers. I don't think anyone would ever disagree with alternative green energy - it's where they are sitting them that people have the problem with.

"There are thousands of empty square miles in Yorkshire but in a place like Anderson it's absolutely crazy.

"I don't think people want to see great big wind turbines towering

over them.

"One is going to be a kilometre from here and it's nearly as tall as the London Eye."

A National Wind Power spokeswoman said: "We have not been made aware of any house price devaluations or sale problems involving our sites but if people are concerned we would like them to let us know as we can't do anything if we don't know."

A court in Cumbria recently found that a proposed wind farm had

devalued a property near Furness.

Buyers Barry Moon and Gill Baythornthwaite took the vendors of their home to court because they were not warned of a proposed wind farm.

District Judge Buckley decreed that this was "material misrepresentation" and ordered David and Diane Holding - who had been active in a campaign to stop the wind farm coming to the area - to pay back 20 per cent of the market value of the house with interest.