

**Orleans  
Wind  
Economics  
Committee  
Findings**

## Introduction

This Document resulted from the seven 3 hour meetings covering the time-span of 2/24 to 5/12 /2010. These meetings were open to the Public and were well attended.

These Findings focused on the Anticipated Positive and Negative Economic Aspects of Wind Farms to the:

*School, Town, Participating and Land Owners, Non Participating Land Owners, Local Tourism, and Property Values.*

From the outset the Committee strived to uncover, and understand the relevant factual information, digest it, and document the Committee Findings in a form thought to be most useful for the *Orleans Council, Planning Board and the Zoning Board.*

This document represents the *Consensus Findings* and Recommendations of the Orleans Wind Economic Committee.

The attached Computer CD contains the 51 References that were used by the Orleans Wind Economics Committee in arriving at our Findings.

Signature Page

**Mr. Jay Burrows:** Local Resident, Dairy Farmer and Land Owner

**Mr. Tom Johnson:** Local Resident, Zoning Officer City of Watertown, Former Member of the Orleans Council

**Les Henry:** Local Resident, Realtor, Former Dairy Farmer and Land Owner

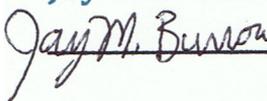
**Tom Hodges:** Real Estate Inspection Services , Member of Orleans Planning Board

**Lee Klock:** Local Resident, Dairy Farmer and Land Owner

**Wendell Walldroff:** Local Resident and Land Owner, Partner in Agricultural Equipment Company

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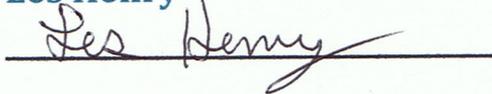
**Jay Burrows    Lee Klock**

**Tom Hodges**



**Les Henry**



**Tom Johnson**



**Wendell Walldroff**



## Summary a description of the Overlay District

- The total assessed value of the Overlay District is \$12,500,000.00
- The assessed value of Agricultural land is about 20% of the Total Overlay District or \$2,500,000.00.
- And the Residential Property is about 80% the Total or \$10,000,000.00.
- The Overlay District has 130 Separate Land parcels, 75% of them are Rural Residential whose parcels range from about 1 acre to over 200 acres.
- The remaining 25% of the Overlay District is currently being used for Agricultural activities.

## **The Financial Impact of Commercial Wind Turbines on the LaFargeville School**

### **Contents:**

**Expected income from a PILOT agreement**

**Effect of PILOT on state subsidies**

**Alternatives to PILOT agreements**

### **Expected income from a PILOT agreement**

In a properly negotiated PILOT agreement the School might receive 50% of the developer payment. The Town would receive 10 – 30%, and the County would receive 20 – 40%. PILOT agreements generate less revenue than common tax formula, but the wind Developers typically do not find this viable. By negotiating an agreement (usually for approximately 15 years) the developer can fix the cost and not be subject to tax increases or reassessment of the Turbine site. The keys to properly negotiating the PILOT agreement include professional consultation throughout the process.

Each Turbine Site is usually valued at approximately \$2M. The tax formula in the Town of Orleans is approximately .015 of assessed value per year. This would produce \$30,000 per Turbine per year. A PILOT agreement might yield a little more than half as much revenue as the tax formula, say \$15,500. On the basis of a 50% share of PILOT monies, the School would therefore receive approximately \$7,750 per year, per Turbine.

## Effect of PILOT on state aid to School s

State aid the School District could be negatively influenced due to revenue from wind farms. The current state aid to School s is based on the wealth of the district. The state looks at the amount the School has budgeted for the year ahead for funding of state required programs. The School applies for state aid calculating taxable land values and income per household. At the present time approximately 50% or more of the money needed for the School District comes from State Aid.

We must concern ourselves that if we enter into a PILOT agreement, the revenue from it will not be factored into the state aid calculation. If it factors in, the State Aid would decrease. There is much discussion at the State level in this cash strapped economy that could allow the PILOT generated revenue to influence the wealth and therefore affect subsidies. School Superintendents and state officials are having ongoing meetings over changes in “fair distribution” It is of great importance that state aid related factors are considered in a PILOT negotiation.

## Alternatives to PILOT agreements

There are alternatives to PILOT agreements that are structured somewhat differently. One such alternative is a host community agreement (HCA). These occur when the authorities of a municipality enact legislature allowing direct payments to the School, Town and other Participating Entities. These differ from PILOT agreements in that the municipality may participate in revenue sharing based on actual or potential power production, or, acquire electrical power from the Turbine developer. Host Community Agreement usually work best on large wind farms or where the electrical needs of the Municipality are large.

## The Financial Impact of Commercial Wind Turbines on the Town of Orleans

### Contents:

#### Safeguarding against negative cost impact

#### Negotiating revenue

### Safeguarding Against Negative Cost Impact

There are at least five issues or events that could lead to Town Revenue loss.

1. Liability for damage to person or property
2. Liability for environmental damage
3. Cost incurred to remove failed or abandoned wind power infrastructure
4. Loss of tax revenue if project is abandoned and tax burden falls on Land Owner who cannot pay
5. Reduction in revenue if existing state or federal subsidies to wind power development are lowered or discontinued

The liability for person and property is best covered by requiring the wind developer to carry sufficient insurance. This is best handled by the Town Attorney. Examples of damage include ice-throw, collapse of tower, electrical hazards, etc.

The liability for environmental damage (oil spill, etc.) should also be covered by Insurance. The Town Attorney can work with the DEC to establish policy terms. Examples of environmental damage include ground contamination, bird death, bat death, acoustic pollution, and general habitat disruption for humans and wildlife.

The abandonment of Wind Turbines and associated infrastructure (decommissioning) must be a planned cost to the developer. There are three methods in general use that prevent the Town from having to pay: Letter Of Credit, Performance Bond, Or Interest Bearing Bank Account. The Interest Bearing Account is the safest for the Town, but it is more difficult to negotiate than the other two means.

If the project is abandoned there is the possibility that the Land Owner becomes responsible for the Taxes. If this occurs and the owner cannot make the Tax Payments, the only recourse for the Town is a Tax Lien on the property. This becomes lost revenue in most cases, but can be avoided

if the lease agreement between the Land Owner and the Developer is correctly worded. Another way to prevent this is to establish the wind towers as “Suffix” Property. This treats them like Cell Towers and Billboards. The Owner/Operators of Suffix Property always remain liable for the taxes, yet the Land Owner still receives the Leasehold Revenue.

If the existing subsidies from State and Federal Government dry up, the economic viability of Wind Power comes strongly into question. The likelihood of project abandonment greatly increases. Also, if the Town has negotiated a revenue stream based on potential or actual megawatt output, this revenue is completely lost upon abandonment. Therefore, the negotiation with the Developer must carefully address the potential loss of subsidies.

A Compliance Handling Committee should be formed by the Town of Orleans to respond to citizen complaints. This Committee could also insure that the Wind Power Developer meets the covenants of the PILOT agreement, including site maintenance at the Turbine locations.

### Negotiating revenue

The potential revenue from a PILOT negotiation depends on the expertise of those representing the Town in the process of negotiation. All of the safeguards mentioned above must be put in place. The cost of inspection, compliance enforcement and attorney participation are factors to weigh against the intended revenue portion going to the Town. The Town, School and County are best served working in unity.

There is typically a commercial boost to areas that host Wind Turbines. Construction Jobs, Hotel use by Imported Workers, Restaurant Activity, etc. create a short term boost to the regional economy.

## **The Financial Impact of Commercial Wind Turbines on Property Values**

### **Contents:**

**Effects of nearby Turbines on property values**

**Potential for decrease tax base**

**Potential land value increase for Participants**

**Realtor experiences elsewhere regarding Turbines**

### **Effects of nearby Turbines on property value**

The visual impact of Commercial Wind Turbines that are near, say, within a mile or less, dominates all other features in that view. The characteristics of the property that give it visual appeal and therefore Property Value can be taken away by the sheer size of the Wind Turbines. Wind Developers usually claim that property values do not decrease due to near-view Wind Turbines. They may point out that time on the market may increase, but Property Value cannot be proven to decline. In contrast to the Wind Power Supporters, however, many Realtors have seen potential buyers back out without making an offer once they discover Near-View Turbines on or adjacent to the property for sale. In a Wisconsin study taken in 2009, properties in the Turbine influenced areas sold for less than comparable properties outside the Turbine Influenced Area.

### **Potential for decrease in tax base**

If Property Values decrease due to the presence of Wind Turbines, and this decrease proves to continue for several years, it is obvious that an assessed value tax base would erode. The payments to the School and Town from the Wind Farm Development will offset the potential erosion of property values initially, but over time and certainly after the expiration of the pay agreement, this tax base erosion would stand out clearly. In addition to decreased tax base, the interest level in other development in the area could diminish.

## Potential Land Value Increase for Participants

Since a Participant landowner would collect lease revenue from the wind Turbine developer, the income earning potential for the property increases by the amount of yearly payments. If the surrounding properties depreciate in value due to the wind Turbine, the value of the Participant property would depreciate when the income stream from the Turbine lease stops. It could then be said that the Participant's property value would be increased during the period of rent collection, but subject to long term depreciation if the Turbine negatively affects the surrounding property values.

## Realtor Experiences Elsewhere Regarding Turbines

In a sales study conducted in the Wisconsin wind Turbine impact study mentioned above, Wind Turbines negatively affected land value by up to 40%. This was based on three large wind farms consisting of 88, 86 and 41 windmills. The percentage of negative impact would probably be less in the Town of Orleans, since hundreds of Turbines are not anticipated. The Wisconsin Realtors expect property values to fall in 49% of cases involving Wind Turbines; with the other 51% of cases the property value remains unchanged. In this study both developed and undeveloped properties were considered and suitable comparables were sought and utilized in the evaluation process. In a smaller scale project such as anything Orleans would contemplate, the influence of Turbines on property values would be less extreme. The distance from the Turbines to the property is the most significant factor.

In most of the case studies done by Renewable Energy Policy Project (advocates of wind development) factors are omitted such as changing economies and market conditions, residential versus rural properties, setbacks, and noise effects. Approximately 90% of these studies found no change in property values within the Turbine View Shed. These studies are obviously distracting to the clarity of thinking needed to correctly determine the effect of Wind Turbines on property values.

After reviewing articles and studies on wind energy, Wind Turbines appear to have a negative impact on property values in close proximity.

Nearly all of the studies funded by Wind Farm Developers or renewable energy advocacy groups found no impact on property value.

## **The Financial Impact of Commercial Wind Turbines On Participants**

### **Contents:**

**Positive impact on farms**

**Negative impacts on farmland**

**Impact on future property taxes**

**Liabilities imposed by the Turbines**

### **Positive Impacts on Farms**

The direct financial gain from hosting a Wind Turbine can be approximately \$8,000 per year, possibly adjusted annually. This figure is based on a 2 megawatt Turbine. The hosting period could last for 15 to 25 years depending on the financial success of the Wind Developer, the longevity of subsidies from State or Federal Government, the health and maintenance of the Turbine itself, and many other factors. If an agreement is arranged whereby the Participant would also gain revenue based on energy market factors and Turbine performance, this \$8,000 amount could increase.

If the revenue given to the Town and School from a PILOT agreement has a positive Impact on future tax increases (prevents or controls them), the Participant would benefit from stable tax burdens going forward. Access roads built for Turbine construction and maintenance could aid the landowner in harvesting during wet conditions.

## Negative Impacts On Farmland

There can be a minor loss of acreage per Turbine (up to 3 acres depending on the length of the access road).

The new roads create smaller fields to work in requiring more turning.

Livestock patterns may be altered requiring additional fencing. The coming and going of workers for construction or maintenance may be a minor disturbance of privacy.

## Impact on Future Property Taxes

As discussed previously, the revenue from the Turbines could positively affect tax burdens. However, if property values decline due to the presence of Turbines, the general tax basis could erode, especially after the revenue from the Turbines is discontinued.

The greatest threat to the tax base is lowered property values based on View Shed disturbance by Turbines. This affects both the Participants and Non-Participants.

## Liabilities Imposed by the Turbines

The dangers and liabilities potentially caused by Turbines are widely discussed in the Health and Safety portion of the Town of Orleans Wind Energy Committee Findings. The danger of Turbines can be physical in nature (ice throw, blade break-off, electrical hazards, and even potential collapse). The economic liabilities include potential abandonment of Turbines and tax burden falling on the Land Owner.

The Participating Land Owner must carefully structure the lease to provide for the event of abandonment and decommissioning cost burden. The liability protection for people, property and the environment must be adequately underwritten. Safeguards need to be in place that protects the Land Owner from tax burden created by project abandonment.

## The Effect of Commercial Wind Turbines On Non-Participants

### Contents:

**Effect of nearby Turbines on non-Participant property value**

**Compare benefits of Turbines for Participants and non-Participants**

### The Effect of Nearby Turbines on Non-Participant Property Value

For those who live close to properties containing Wind Turbines, the View Shed has been changed from its' Pre-Turbine condition. A potential buyer of such Real Estate would probably not be aware of the Pre-Turbine View Shed, and would make an offer based on existing conditions. The question is: what would that offer have been for the property in its' original state?

Since land values change based on economic conditions, lending rates, and the state of repair of the improvements on the property, a fact-based answer to the question is difficult to obtain or even pursue. It would be conjectural in nature.

In a Texas study, properties with Turbines were photographed and shown to potential buyers along side photos of similar properties without Turbines. The results indicated that the buyers would pay somewhat more for the properties without Turbines. This study is very useful in that it compares Farmland Properties, Residential Properties, and Rural Unimproved Properties both with and without Turbines. In a Rural setting, the nearby effect of Turbines can be less pronounced than in Semi-Rural or Town settings.

An example of this occurs at the Wind Farm east of the Tug Hill plateau where rolling hills absorb some of the visual impact of the Turbines. The Town of Orleans is topographically more flat, and certainly the effect of nearby Turbines would be stronger as regards to View Shed. The noise and flicker factors would not be as dramatic as the View Shed due to setbacks. It is quite possible that in Orleans the value of property would be more negatively affected than that east of the Tug Hill. It is not possible to quantify these Findings.

Even more difficult to calculate are quality of life factors. Once again, the potential buyer is unaware of quality of life on that property having never lived there.

In Orleans, most property owners live on their land. These properties are, in effect, Rural Residences.

## **Compare Benefits of Turbines for Participants and Non-Participants**

The Participant can benefit in the ways described previously through leasehold revenue. The Non-Participant could benefit if their property value improves, but this is an unlikely scenario. If the PILOT agreement provides sufficient revenue to where tax rates can be reduced throughout the Town, everyone can benefit. There would certainly be benefit if the Wind Developer provided revenue to Non-Participants.

This has occurred in a minority of cases, and these situations have usually involved Large Wind Farms. Also, Property Value Assurance Agreements have been reached on occasion whereby the Wind Developer assures the Property Value Of Non-Participants.

Possibility for benefit occurs when easements and right-of-ways are negotiated between the Wind Developer and the Non-Participating Landowner yielding lease revenue or one-time payment.

Generally speaking, however, the Participating Landowner receives significantly more benefits than Non-Participating Landowners.

## **The Financial Impact of Commercial Wind Turbines on Tourism/ Recreation**

### **Contents:**

**Positive and negative impact near populated areas**

**Basis for existing growth rate in NNY**

**Effects of nearby Turbines on peace and quiet in NNY**

### **Positive and Negative Impact Near Populated Areas**

There was a study conducted in Scotland concerning the effect of Turbines on Tourism.

There were large Wind Turbines in place at this site. The study occurred in a sea shore community.

The conclusion: there is no effect on Tourism that can be attributed to Wind Turbines. There is very little information aside from this study because Resort Area Turbine construction is rare or very recent (Wolfe Island).

There is a noticeable difference between the seaside area of Scotland and the 1000 Islands Region, however.

That difference is the tourists to the Scotland site are one or two time visitors. As we all know, the River Tourists come frequently from both long and short distances. Some own summer homes or moor a cruiser for weekending. Others attend our camping parks and return every year. Most of our tourists and seasonal cottagers are very tuned into the present View Shed.

The tourists to the Scottish seaside were mostly long distance or overseas travelers. We are already experiencing resistance to Wind Turbines in some of the surrounding Small River and Lake Ontario Towns.

## Basis for Existing Growth Rate in NNY

During the last several decades, NNY has slowly expanded due to several factors. Some of these factors include the growing popularity of the 1000 Islands.

This has attracted substantial investment from would be 2<sup>nd</sup> and 3<sup>rd</sup> Homeowners.

Amish families have found large plots of abandoned farm land at reasonable prices.

Fort Drum has continued to expand creating commerce and construction work.

Another factor has been the reasonable cost for a middle class family to experience a rural life style by purchasing a farmette or country residence.

The Fort Drum expanders would unlikely care if Wind Turbines appear. The Amish, 2<sup>nd</sup> Home Builders, Cottagers, Repeat Tourists, And Rural Life Style Constituencies would all view the coming of Turbines more seriously.

It is very important that we are careful not to overlook our recent growth history and the effect Turbines might have on future growth.

## Wind Ordinance Recommendations

The Committee believes that the wind ordinance should provide protection and remedies necessary to safeguard for the concerns discovered in our finding of facts.

Among these are:

1. Develop a Balanced Property Value Protection Assurance Plan to protect Property Values in the Vicinity of Wind Turbines. (1-3 miles)
2. Develop Proper Bonding for Protection from Wind Farm Non-Performance issues.
3. Applicant is required to develop a satisfactory proposal to adequately protect the Welfare of both Participating and Non-Participating Land Owners.
4. Either Traditional Taxation or a PILOT program must be robust enough to support the project and the Net Benefits must indicate a strong long term positive effects for the Community as a whole.
5. Applicant to pay for Legal Counsel retained by the Town for Legal Review of Participating Land Owners Lease.
6. A Lease Agreement that is the same for all Participating Land Owners (depending on the number of Turbines per owner).
7. Establish a fund that is payable at the time of application to fund legal, environmental and research other items necessary to evaluate and process the application based on the size of the project.