

FILE

Butler, Matthew

From: Valerie Malicki <valeriechristina@rocketmail.com>
Sent: Friday, August 22, 2014 3:18 PM
To: Puco ContactOPSB; Valerie Malicki
Subject: Customer Complaints

RECEIVED DOCKETING DIV

2014 AUG 22 PM 5:00

PUCO

13-0990-EL-RGN

55

Dear OPSB,

I asked Monica about the response of the people who live near the wind projects operated by Windlab. See below. Apparently it is a common theme for Windlab, in their brief history at that, to quickly sell projects they build, absolving them of promises.

"Promises" that Monica again made to me, on recorded video, about their being an open door to resolve ANY problems or issues, in the community, or even in my home, that arise with the project.

Adrian and Helen Lyons had problems with the noise.

NO ONE LISTENED TO ADRIAN AND HELEN LYONS, NO ONE!!, BUT ESPECIALLY NOT WINDLAB, (see below --- remember this is their HOME --- so sad)

Adrian and Helen write of a "dramatically changed sound environment,"... "the sound from the turbines is very different from the normal environmental sounds" (Infrasound travels very long distances, and must be accounted for in addition to simple decibal noise measurements.)

A COMPANY'S FUTURE ACTIONS ARE BEST PREDICTED BY THEIR PAST ACTIONS.

PLEASE FOLLOW YOUR CONSCIENCE AND DO NOT LET THIS COMPANY DESTROY OUR LIVES WITH THEIR TOXIC INFRASOUND LOW-FREQUENCY (ILFN) EMISSIONS!
(Again Monica, a wind "expert" REFUSES to answer basic questions about).

One could say that was Australia, not America. Past actions predict future actions. How has this very board responded to the Greenwich community this entire summer?

This is to certify that the images appearing are an accurate and complete reproduction of a case file document delivered in the regular course of business.
Technician Date Processed AUG 22 2014

A petition of approximately 300 people, citizens begging, individually, and collectively for more information, for a mere meeting. Kindly, naively, citizens asking to please help us understand the project. Well, you tell me how those concerns were listened to. I am glad that at least Matt Butler and Steve Irwin are very familiar with the cries of the community. Unfortunately, it is clear our voice has not been heard.

Please correct this action. Please listen to our community. Please fulfill your mission of providing safe and affordable electricity to Ohioans. This project will produce very very little electricity, as Emmett Robinson so clearly shows in his submission. The renewable mandate is no longer in place (a politician's green Kool-Aid, ivory tower dream, a wind dream that has failed in so many countries worldwide. It is not based on reality). This aspect alone has changed since the Staff Report.

**This project MUST meet the public interest, need, and convenience.
IT IS CLEAR IT DOES NOT, ESPECIALLY BY THOSE IMPACTED THE MOST.**

Please apply common sense and deny this certificate.

Respectfully,

Valerie C. Malicki, MA, LPCC

SEE BELOW FOR THE COMPLAINT/NOISE ISSUE THAT WAS UNRESOLVED BY WINDLAB.

To: Valerie Malicki <valeriechristina@rocketmail.com>;
Subject: RE: Oaklands Hill Wind Farm
Sent: Thu, Jul 3, 2014 8:23:33 PM

Hi Valerie

The wind industry do make it easy to do detective work though. Whilst they are cunning and good at deceiving they tell to many lies to be able to cover up everything they do.

This is what I received back from Adrian and Helen Lyons at the Oaklands Hill Wind Farm. I haven't received anything back from Collgar Wind Farm yet but I am led to believe that there are 'gag orders' involved there.

As you can see though it appears Windlab just do the dirty work, take the money and run and leave the disaster to others.

Yes we are still at this email address, but are very busy at present. So will only give a brief reply.

Windlab was only about while we were being offered turbines, and had disappeared by the time of the approval hearing. They promoted themselves as an off-shoot of the CSIRO, with expertise in sighting wind-turbines.

I got the opinion that Wind-lab Systems was a private company which had received a \$100,000-00 grant from the CSIRO, but had a lot of names that appeared similar to names associated with the Clean Energy Council. (Sorry I did not keep the details). AGL bought out Investec and Windlab soon after the Government approved the project and the permit was granted. AGL have since sold the Wind Farm to a group controlled by the Challenger Group, but have remained in control of operations.

Luke Osborne is not a name I am familiar with, we had a Mark Headland, Investec Bank, as project manager, and a Mark Tansley.

When the wind Farm started operating we lodged complaints with the operators (COMPLAINT NUMBER, OHWF201101), the Shire, Politicians, and the Victorian Planning Department. Articles about our situation were published in the local Hamilton Spectator, Warrnambool Standard, the Country Style Magazine, and the Illwind internet site. The easiest article to now find is the Standard's one published on 10th Sept 2011. Our complaints have never been followed by a visit from any sort of government person who could observe features of our dramatically changed sound environment.

The operators have conducted a lot testing near and in our house, but we believe this testing has not been done in a meaningful manner. We have noticed that although noise from the turbines is not extra loud when you are close to them, they can be heard at greater distances than unacceptably loud normal noises are when such noise is made near the turbines. This indicates that the sound from the turbines is very different from the normal environmental sounds that are experience on our farm, and we question why this difference is not observed in the reports or data we have been given on noise in and near our house.

The turbines on the western side are turned off at night, and the lot are meant to shut down under some low wind conditions because of a tonal problem. These restrictions have been in place since early 2012.

We do not mind if you pass on copies of our submission to Victorian Inquiry into the Approval Process for Renewable Energy Projects.

Hopefully this answers some of your questions.

Adrian + Helen Lyon

Australian Industrial Wind Turbine Awareness Network

"If you shut up truth and bury it under the ground, it will but grow, and gather to itself such explosive power that the day it bursts through it will blow up everything in its way".

EMILE ZOLA

LINKS TO INFORMATIVE WEBSITES:

Human Impact: <http://globalwindenergyimpact.com/> ; <http://mothersagainstwindturbines.com/>;

Health and Noise Impacts: <http://www.windturbinesyndrome.com/>; <http://waubrafoundation.org.au/> ;

Property Loss: <http://windturbinepropertyloss.org/site/>;

Fire: <http://turbinesonfire.org/> ;

Sites with lots of information on economics, efficiency, environmental impacts, real life stories, reports, data, news and interviews: <http://www.wind-watch.org/> ; <http://stopthesethings.com/> ; <http://quixoteslaststand.com/> ; <http://www.windwiseradio.org/> ;
<http://www.friends-against-wind.org/>;

Links to over 2000 international anti-wind groups: <http://quixoteslaststand.com/worldwide-anti-wind-groups/> ; <http://ontario-wind-resistance.org/>; <http://epaw.org/>; <http://na-paw.org/>; <http://www.windaction.org/>;

Date: Wed, 2 Jul 2014 08:12:52 -0700
From: valeriechristina@rocketmail.com
Subject: Re: Oaklands Hill Wind Farm
To: aiwtan@hotmail.com.au

Was going right to bed when you wrote last nite. Thank you thank you! You are an amazing detective!!!!

Cheers,
Valerie :)

From: Patina Schneider <aiwtan@hotmail.com.au>;
To: Valerie Malicki <valeriechristina@rocketmail.com>;

Subject: Oaklands Hill Wind Farm
Sent: Wed, Jul 2, 2014 2:41:02 AM

Hi Valerie

I had sent Adrian an email but have not received a response back yet, as the attached submission is in the public arena, I just checked to make sure, I thought I would send anyway.

http://www.parliament.vic.gov.au/archive/enrc/inquiries/renewable_energy/submissions/018%20Adrian%20and%20Helen%20Lyon.pdf

Whilst they talk about AGL, Windlab feature this wind farm.

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Oaklands Hill Wind Farm

Australian Industrial Wind Turbine Awareness Network

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<http://www.friends-against-wind.org/>;

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Butler, Matthew

From: Valerie Malicki <valeriechristina@rocketmail.com>
Sent: Friday, August 22, 2014 4:21 PM
To: Puco ContactOPSB; Valerie Malicki
Subject: abandoned homes, again
Attachments: windturbinesyndrome.com-
Clinician_calls_Mass_Wind_Turbine_Health_Impact_Study_pure_moonshine.pdf; McCann
Mason County, Kentucky Value Impact UPDATED SUMMARY.pdf

Dear OPSB,

Please reference case#13-0990-EL-BGN.

Monica Jensen gave me a "Wind Turbine Health Impact Study" as the other significant documentation supposedly "proving" to me the safety of the wind turbines.

Fascinatingly, this very report also has major research flaws. The attached article is, "Clinician calls Mass. 'Wind Turbine Health Impact Study' pure moonshine." Written by:

Helen Schwiesow Parker, Ph.D. (Chilmark, MA)
Licensed Clinical Psychologist
Past Clinical Supervisory Faculty, University of Virginia Medical School
Past Director, Purdue Univ. Achievement Center for Children

See quotes below:

Sure, the lay public might nod and say, "yeah, she just picked the ones who said they were sick 'cause they hate the turbines," or "these guys are just complaining so they'll get paid to shut up." In fact, the families in Pierpont's study all had spent or lost a lot of money trying to get away from the turbines, by selling their homes for reduced amounts, renting or buying a second home, renovating their homes in an attempt to keep out the noise, or **outright abandoning their homes**.

In epidemiology this is called "a revealed preference measure." **The people who are suffering show by their actions that their health problem is worth more than the thousands of dollars they have lost in trying to escape the exposure, and thereby distinguish their experiences from what might be dismissed as subjective or fakery.**

Is the MA "expert" panel ignorant of this statistical nicety, or do they think we're too stupid or so bludgeoned by their arrogance that we won't call them on it?

Unquote.

It appears the wind industry in general insults the intelligence of everyone. Just as Monica insulted my intelligence, thinking I would not know how ridiculous the reports she gave me really are.

Please do not let Windlab to insult the intelligence of this very board. Ohioans, we are smart, bold, innovative. Let's prove it.

Do not simply "rubber stamp" this project into certification. Clearly more research must be done, inquiring about the **Infrasound Low-Frequency Noise (ILFN) Emissions** that are driving families from their very homes. Do you think families wanted to be paying two mortgages, as in Shirley Wisconsin? And when I have repeatedly (at this point) asked Monica about ILFN she offers **NO RESPONSE!, NO ANSWERS!**

WE DEMAND A MORATORIUM ON THIS PROJECT UNTIL WE RECEIVE BONA FIDE, INDEPENDENT, EVEN COMMON-SENSE RESEARCH ABOUT ITS IMPACT ON OUR COMMUNITY.

Secondly, I SUBMIT A PROPERTY APPRAISAL STUDY BY AN INDEPEDENT APPRAISER. HIS STUDY REVEALS THE SIGNIFICANT IMPACT WIND TURBINES HAVE ON PROPERTY VALUES.

AGAIN, THIS IS COMMON SENSE. REAL ESTATE IS ALL ABOUT LOCATION, LOCATION, LOCATION.

WOULD YOU WANT TO LIVE BY 25 JUMBO JET ENGINE PLANES OPERATING AT A SITE 717 FEET FROM YOUR HOME? WOULD MONICA JENSEN HERSELF? HAS SHE SPENT THE NIGHT IN A HOME THAT IS KNOWN TO BE INFRASONICALLY TOXIC?

I trust you will each make the obvious, common sense decision for this project. NIX THIS RIDICULOUS PROJECT. DENY THE CERTIFICATE, FOR THE SAFETY OF ALL OHIOANS, AND THEIR HOMES AND FARMS (THEIR BIGGEST INVESTMENTS IN THIS LIFE).

OUR HOMES SHOULD NOT BE LOW-FREQUENCY NOISE RECEPTOR SITES.

Respectfully,

Valerie C. Malicki, MA, LPCC

Clinician calls Mass. “Wind Turbine Health Impact Study” pure moonshine

Helen Schwiesow Parker, Ph.D. (Chilmark, MA)
Licensed Clinical Psychologist
Past Clinical Supervisory Faculty, University of Virginia Medical School
Past Director, Purdue Univ. Achievement Center for Children

Click here for a PDF of the following document.

3/18/12

The purpose of this document is to respond to the Wind Turbine Health Impact Study: Report of Independent Expert Panel of January 2012, which was prepared for the Massachusetts Department of Environmental Protection, Massachusetts Department of Public Health.

I've been given the opportunity to review the Martha's Vineyard Commission [3-16-12 draft] Comments on the draft Massachusetts Wind Turbine Health Impact Study, directed to Commissioners Auerbach and Kimmell. Below, “MVC” comments are in blue. Emphasis throughout is mine.

The MVC's initial characterization of the DEP/DPH Health Study is that it is “a useful, though *limited*, literature review.” [Did the independent experts just not have TIME to examine very much of the evidence submitted?] Next the MVC notes their concern that “*the wording of some conclusions is ambiguous and could lead to misinterpretations that understate* the actual or potential health impacts of wind turbines....

“The MVC is concerned that this study might be used as the basis for adoption of excessively permissive state-wide standards that would then be imposed on municipalities with statewide superseding regulations, such as the currently tabled Wind Energy Siting Reform Act....

“*Absence of Proof of Health Impacts' is Not the Same as 'Proof of Absence of Health Impacts.'* The study is often unclear as to whether there is demonstrated evidence that a potential impact does not exist, or whether conclusive studies have not yet been carried out with respect to that factor. [Is this just a BADLY written report? Unintentionally ambiguous, unclear with unjustified conclusions?] In the absence of clear evidence that a given factor is not a problem, it would seem wise to err on the side of caution with respect to development of potentially problematic wind energy projects....

“The report's ambiguous language about this has already lead to questionable interpretations about the report, such as the Conservation Law Foundation's statement that “This new, independent study advances the state of science and debunks common misunderstandings regarding potential health impacts of wind turbines.” *The study should make clear that it is a partial literature review that summarizes some existing science and does not advance it.* It should be made clear that the study's use of the term “limited epidemiologic evidence” does not imply that these impacts should be ignored, and the current *absence of definitive scientific proof* that wind turbines directly cause a specific health impact *does not necessarily “debunk”* contentions that this might be the case....

“In the *absence of definitive studies clearly indicating the absence of significant impacts*, the Martha's Vineyard Commission suggests that the Commonwealth of Massachusetts...*apply the Precautionary Principle*, which states that if an action or policy has a suspected risk of causing harm to the public or to the environment, in the absence of scientific consensus that the action or policy is or is not harmful, *the burden of proof that it is not harmful falls on those*

taking the action....

"For infrasound, the study indicates that 'A possible coupling mechanism between infrasound and the vestibular system . . . has been proposed but is not yet fully understood or sufficiently explained. Levels of infrasound near wind turbines have been shown to be high enough to be sensed by the OHC [Outer Hair Cells]. However, evidence does not exist to demonstrate the influence of wind turbine-generated infrasound on vestibular mediated effects in the brain.' *This does not justify concluding that there is no link*; it merely indicates that these robust studies have not been carried out yet. *The study suggests that there doesn't appear to be a logical explanation for a possible impact of low energy sound levels on the vestibular systems and concludes that it is not worth carrying out further studies about this issue.*" (!)

This is a courageous piece. It is nevertheless restrained in tone as perhaps befits a governmental agency. As a colleague wrote recently, "I was raised that 'you catch more flies with honey than you do with vinegar,' but when you're dealing with thieves & liars, that motto is no longer effective. Even Jesus turned over the tables in the temple on the hypocrites peddling their wares in His house! This country is OUR house! I say it's time to let them know, 'We're mad as hell, and we are NOT going to take it anymore!'"

These are liars and thieves. This report is neither independent nor expert. And its consequences are neither abstract nor academic. Had this limited, unclear, ambiguous report with its unjustified conclusions which understate potential health impacts, leading to misinterpretations and tempting ludicrous claims that it advances science and debunks the validity of observation and self-reports of the impact of turbines on the health of those nearby.... had this report not come out biased, disingenuous and misleading as it did, those trying to stave off the erection of the two behemoths in Fairhaven might have been better able to persuade others in that fair city of the harm soon to be visited upon them.

Their quality of place has been stolen from the residents of Sconticut Neck, Little Bay Woods, and Peirce's Point. The report is a lie as bald as that put forth by Sumul Shah of Fairhaven Wind LLC, who brushed off audience concerns about flicker at a January wind forum, saying "they mostly occur before 7 a.m." Think about that! "Flicker" [more accurately described as strobing] occurs across a broad range of time after sunrise and before sunset, which varies according to the season, at any time when the turbine blades which reach 400' into the air intermittently block sunlight flowing down past the blades across a broad swath of landscape. Liars and thieves.

And what of the lies told consistently, attempting to rob *true independent experts* of their credibility and professional integrity. Let's look at just one example from the MA DEP/DPH report. Referring to *Wind Turbine Syndrome, A Report on a Natural Experiment* (2009) by Nina Pierpont, MD, PhD, the MA DEP/DPH report states unequivocally: "limitations to the design employed make it *impossible* for this work to contribute *any* evidence to the question of whether there is a causal association between wind turbine exposure and health effects" (p24).

Well then! So much for Dr. Pierpont, honors graduate of Yale, MD from Johns Hopkins, PhD in population biology from Princeton. Note a different appraisal from her peer reviewers, Drs. Katz (epidemiology), Lehrer (otolaryngology), Haller (neurology), and Horn (population biology). All four reviews have been reprinted in their entirety in the book. As excerpted below:

Your high level of scientific integrity is revealed both in your [research] design decisions and in your writing.... You have laid a remarkable, high quality, and honest foundation for others to build upon.... [Y]ou have made a commendable, thorough, careful, honest, and significant contribution to the study of (what we can now call) Wind Turbine Syndrome." —from the referee report by Ralph V. Katz, DMD, MPH, PhD, Fellow of the American College of Epidemiology, Professor and Chair, Department of Epidemiology & Health Promotion NYU College of Dentistry.

The careful documentation of serious physical, neurological and emotional problems provoked by living close to wind turbines must be brought to the attention of physicians who, like me, are unaware of them

until now.” —from the referee report by Jerome Haller, MD, Professor of Neurology and Pediatrics (retired 2008), Albany Medical College, Albany, New York. Dr. Haller is a member of the American Academy of Pediatrics, the American Academy of Neurology (Child Neurology Section), and the Child Neurology Society.

Dr. Pierpont has gathered a strong series of case studies of deleterious effects on the health and well-being of many people living near large wind turbines. Furthermore, she has reviewed medical studies that support a plausible physiological mechanism directly linking low frequency noise and vibration (like that produced by wind turbines and which may not in itself be reported as irritating) to potentially debilitating effects on the inner ear and other sensory systems associated with balance and sense of position. Thus the effects are likely to have a physiological component, rather than being exclusively psychological....” —from the referee report by Henry S. Horn, PhD, Professor of Ecology and Evolutionary Biology, and Associate of the Princeton Environmental Institute, Princeton University.

What problems did the MA “expert independent” panel have with her study design? After having cherry-picked which evidence among the thousands of pages of material to ‘review,’ the panel essentially claimed Pierpont cherry-picked her subjects: “The way in which these participants were recruited makes it *impossible to draw any conclusions* about attributing causality to the turbines” (p25).

Time and again, the “expert” panel takes liberties with the scientific illiteracy of the public to distort the truth of what they purport to review. Over and over, I asked myself, which side of the stupid fence are they sitting on? As supposed experts equipped with the knowledge of statistics necessary to do a lit review, are they not even familiar with the significance of the “revealed preference measure”?

Sure, the lay public might nod and say, “yeah, she just picked the ones who said they were sick ‘cause they hate the turbines,” or “these guys are just complaining so they’ll get paid to shut up.” In fact, the families in Pierpont’s study all had *spent or lost a lot of money* trying to get away from the turbines, by selling their homes for reduced amounts, renting or buying a second home, renovating their homes in an attempt to keep out the noise, or outright abandoning their homes.

In epidemiology this is called “a revealed preference measure.” The people who are suffering show by their actions that their health problem is worth more than the thousands of dollars they have lost in trying to escape the exposure, and thereby distinguish their experiences from what might be dismissed as subjective or fakery.

Is the MA “expert” panel ignorant of this statistical nicety, or do they think we’re too stupid or so bludgeoned by their arrogance that we won’t call them on it?

In another instance of taking liberty with the scientific illiteracy of the public to distort the truth of what they purport to review, it’s important to examine the panel’s attempts to confuse, obfuscate, muddle and misuse the term “annoyance.”

Beginning with the “expert” panel report’s executive summary: “Most epidemiologic literature on human response to wind turbines relates to self-reported ‘annoyance,’ and this response appears to be a function of some combination of the sound itself, the sight of the turbine, and attitude towards the wind turbine project.”

Of course, “the public” tends to hear that term and think of a transitory state ranging from “merely” annoyed, to pretty annoyed to *seriously* annoyed, but in all events it doesn’t mean a person is getting sick over it. Whereas for the medical/mental health professional, there can be some very serious pathology in that ‘annoyance’ box. (See two-page endnote on “Annoyance.”)

Yet a panel member—Marc G. Weisskopf, ScD Epidemiology; PhD Neuroscience, Associate Professor, Department of Environmental Health & Epidemiology, Harvard School of Public Health—when asked by the press to give the

clinical definition of "annoyance," responded [approximate, not recorded verbatim]: "First of all, there is no clinical definition for 'annoyance.' The WHO doesn't have one since what they see are 'health effects' instead. It is by some definitions a 'self-reported' effect *and does not have a clinical significance.*"

Oh, but it can have severe clinical significance! Once again, within the context of this biased and ambiguous report, it's impossible not to conclude that we're being toyed with, our appreciation of IWT health impacts intentionally manipulated with semantic games and worse. The panel is not expert or not independent, or both.

Back to the Pierpont study. Using a very robust case-crossover design, Pierpont gathered self-report data on symptoms before, during, and after exposure to the turbines. Within her subject families, all had at least one severely affected adult family member, and affected subjects had gone away from the wind turbines and seen their symptoms go away, and had come back and seen the symptoms return, generally several times. In epidemiology this is called a "case-crossover" design.

This statistical design is an unusually robust one and of choice in situations where both the exposure and the disease are transitory. People distance themselves from the turbines and their symptoms abate or disappear (until they've become ingrained over time, unfortunately). Back to the turbine area and the symptoms return. Despite infinite individual differences between subjects, Pierpont found symptom consistency statistically correlated with the presence or absence of the turbines.

What is it about the case-crossover design that causes the "expert" panel to claim that "limitations to the design employed make it impossible for this work to contribute any evidence to the question of whether there is a causal association between wind turbine exposure and health effects" (p24)? The best they can offer (and which just might be persuasive to the casual reader, but would be laughed out of a Psych 101 class): "There are also many factors that change when moving, making it difficult to attribute change to any specific difference with certainty"(p25).

Carl V. Phillips, MPP, PhD, is a Harvard-trained epidemiologist and professor of public health with outstanding credentials including a Robert Wood Johnson Foundation Scholars in Health Policy Research postdoctoral fellowship at the University of Michigan. In "Properly Interpreting the Epidemiologic Evidence about the Health Effects of Industrial Wind Turbines on Nearby Residents," *Bulletin of Science, Technology, and Society*, vol. 31, no. 4 (August 2011), pp. 303-315, Phillips is direct in his dismissal of such biased nonsense:

Failure to understand how to draw scientific conclusions and myopia about a single method for modeling physical health effects are problematic, obviously. But they are not so clearly reprehensible, from an ethical standpoint, as telling people that their suffering does not really 'count' for some technical reason."

Phillips introduces the above by summarizing: "There is overwhelming evidence that wind turbines cause serious health problems in nearby residents, usually stress-disorder type diseases, at a nontrivial rate.... There has been no policy analysis that justifies imposing these effects on local residents. The attempts to deny the evidence cannot be seen as honest scientific disagreement, and represent either gross incompetence or intentional bias." Apply that to the MA DEP/DPH supposedly "Independent Expert" Panel's Draft report, and you get the most succinct and fair assessment of as you're going to find anywhere. Let's hope the final version is markedly improved.

I'd like to turn here to a more constructive response to the MA Wind Turbine Health Impact Study. I'd like to offer my own expert independent position taken after over two years researching the topic, equipped with the following credentials:

I'm a Licensed Clinical Psychologist. My Ph.D. was earned from Purdue University, which is known for

excellence in statistics, research design and interpretation. My doctoral dissertation was on PTSD (Post-Traumatic Stress Disorder). I'm a past Clinical Supervisory Faculty member at the University of Virginia Medical School, with a 6th year degree in Psychometry from Purdue, double Masters Degree in Special Education, past Director of Purdue's Achievement Center for Children—a groundbreaking institution offering diagnostics and remedial programming in the field of sensory perception and learning disabilities—which draws clients from around the world. I began my career in 1970 as a teacher and administrator at New Haven's Benhaven, the world-renowned private agency serving children, adolescents, and adults with autism and pervasive developmental disabilities.

My experience and training allow me to appreciate the subtle connections between the low frequency sound waves emitted by industrial scale wind turbines, and the Wind Turbine Syndrome (WTS). We're not, after all, bionic man. We're made of flesh and blood and very complicated moving parts ourselves. The sub-audible waves sent out by the turbines set up vibrations and resonance within the cavities of our bodies – ear, ocular orb, skull, our lungs and bellies – which make us nauseous and confused, and in many people provoke vertigo (a spinning dizziness), anxiety, blurred vision, tinnitus (painful ringing in the ears) headaches, tachycardia, difficulty with memory and concentration, panic episodes associated with sensations of movement or quivering inside the body that arise while awake or asleep. Of course they do. They are the ultimate and inescapable boom-box moved in next door. Imagine yourself unable to escape the pulsations.

In addition, I'm absolutely, crystal-clearly certain that, while nearby IWTs surely lead to sleep deprivation in some individuals [unhealthy in itself and which may lead to other significant health problems for those impacted], the effect of the turbine noise (whether "heard" as unnatural, percussive, threatening, "annoying"—or felt as infrasound, consciously or unconsciously) the effect of turbine noise on mental health is direct, powerful, distinct from and additive to the turbines' effect on sleep alone, significant as that is to health and wellbeing, safety and optimal functioning.

The "negative effect of the turbines on mental health" may to some extent, in some cases, result from the neurophysiological effects on the otolaryngological mechanisms suggested by Pierpont and elaborated by Salt. Yet other "negative effects of the turbines on mental health" clearly stand alone and outside this mechanism, perhaps with a causality more easily appreciated by the layperson. Remember that the Israeli army has used infrasound as crowd control for some years..... Put "infrasound interrogation" in your browser.

In many ways, the fundamentals of psychology are intuitive if the layman only stops to think or put oneself into another's shoes. The effect of IWTs on mental health and wellbeing is no exception and must be factored into IWT siting decisions:

» Can we appreciate the hypersensitivity of the autistic child? Can we replicate it empathetically in our own sensory structure? What do you think is the impact of bombarding an autistic child with additive, strident, unpredictable, chronic, aversive stimuli?

» How many people who have chosen to live in semi-rural environments (now targeted for IWT installations) have a similar, albeit less radical, sensitivity to noise? How many chose to locate where their homes are simple shelters welcoming the outside in, for whom the idea of 'sound mitigation' from turbine noise fairly equals life in a padded cell? For what purpose?

» Is it so hard to imagine what our classmates experienced in the hellhole of Vietnam? The baggage returning with our Veterans from the Middle East? You've heard of PTSD: "Post Traumatic Stress Disorder" Do you know that the symptom constellation includes "intense psychological distress or physiological reactivity [heightened sensitivity] when the person is exposed to triggering events that resemble or symbolize an aspect of the traumatic event" [DSM-IV]? Is it so hard to relate to what the throbbing drone of the turbines bring back to their cellular storage of fear/terror/anxiety? Would you want it brought back, had you experienced it—once again up close and within earshot,

but this time at home, where you had invested yourself and your future, believing you were now out of the war zone and safe? And what do we know about the health impacts of the stress hormone cortisol? Quite a bit.

» Beam yourself into the shoes of those with a history of migraine headaches, now exacerbated by the unpredictable whims of the wind. Do we dare entertain an image of what our neighbors suffer when these debilitating headaches now come (still) unpredictably but (now) exacerbated by these towers put up without public input (as in Falmouth, MA) or without informed public or political process (as throughout the world)?

» Add in the psychological distress engendered by the physiological destabilization which Pierpont describes with respect to balance mechanisms, nausea, tinnitus, vertigo, anxiety, panic attacks, memory and concentration loss.

» Add in the victims' helplessness to effect change, betrayal by elected representatives whom we count on to protect our health and well-being, who now stonewall any consideration of our objective outrage of the clear torture waged on our persons. Add in the demands to fight these installations, on-going, with lives given over to complaint protocols, sound measurements, letters to representatives, discouraging consultations with group-hired attorneys, a desire to re-frame every social encounter either to score a point or to pretend this isn't the center of your life.

You think all this doesn't impact mental health? Give me sleep disruption any day.

Health care professionals and academic investigators mustn't limit their investigations into the health impacts of IWTs to sleep disruption and its direct consequences. Each of us can make this common-sensical argument to our elected representatives, take it to the streets, to the press. It's a very important no-brainer for anyone open to listen for the truth.

Endnote on "Annoyance"

(1) In 1991, Suter commented that "Annoyance" has been the term used [in scientific studies] to describe the community's collective feelings about noise ever since the early noise surveys in the 1950s and 1960s, although some have suggested that this term tends to minimize the impact. While "aversion" or "distress" might be more appropriate descriptors, their use would make comparisons to previous research difficult. It should be clear, however, that annoyance can connote more than a slight irritation; it can mean a significant degradation in the quality of life. This represents a degradation of health in accordance with the WHO's definition of health, meaning total physical and mental well-being, as well as the absence of disease." (p. 27)

Suter, A. H. (1991). *Noise and its effects*. Administrative Conference of the United States.

(2) Adults who indicated chronically severe annoyance by neighbourhood noise were found to have an increased health risk for the cardiovascular system and the movement apparatus, as well as an increased risk of depression and migraine.

Niemann H, Bonnefoy X, Braubach M, Hecht K, Maschke C, Rodrigues C, Robbel N. Noise-induced annoyance and morbidity results from the pan-European LARES study. *Noise Health*.

(3) "According to the World Health Organization (WHO), health should be regarded as "a state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity."

"Under this broad definition, noise-induced annoyance is an adverse health effect."

Michaud DS, Keith SE, McMurchy D. (2005). Noise annoyance in Canada. *Noise Health* 2005;7:39-47 [Note Dr. Mchaud is a staff member of Health Canada]

(4) Evidence/references by Respondents during the Ontario Environmental Review Tribunal Decision July 2011-10-03.

"The most common effect of community noise is annoyance, which is considered an adverse health effect by the World Health Organization." Health Canada. Reference Submitted by Dr. Kenneth Mundt.

"...reputable research has shown that noise annoyance is an adverse health effect that can result from wind farms, as it can result in effects such as negative emotions and sleep disturbance." General Purpose Standing Committee No. 5 Rural wind farms Ordered to be printed 16 December 2009 according to Standing Order 231 Reference submitted by Dr. Leventhall.

"No, I don't disagree with your statement; annoyance is a health effect." Transcript of Dr. C. Ollson, Mar, 22, 2011, p. 118, l. 4 to l. 21 testimony under oath by Dr. Christopher Ollson.

(5) "The audible sound from wind turbines, at the levels experienced at typical receptor distances in Ontario, is nonetheless expected to result in a non-trivial percentage of persons being highly annoyed. As with sounds from many sources, research has shown that annoyance associated with sound from wind turbines can be expected to contribute to stress related health impacts in some persons."

Low frequency Noise and Infrasound Associated with Wind Turbine Generation Systems, A Literature Review, Ontario Ministry of Environment RFP Final Draft December 2010

(6) "References, both from peer-reviewed and other literature, acknowledge that IWTs may cause annoyance and/or stress and/or sleep disturbance (Colby et al., 2009 Minnesota Department of Health, 2009; Pedersen & Persson Waye, 2004, 2007; Rideout, Copes, & Bos, 2010; Thorne, 2010)."

Carmen M. E. Krogh, Industrial Wind Turbine Development and Loss of Social Justice? *Bulletin of Science Technology & Society* 2011 31: 321, DOI: 10.1177/0270467611412550 <http://bst.sagepub.com/content/31/4/321>

(7) Maschke et al. (2007) confirms chronic severe annoyance induced by neighbour noise must be classified as a serious health risk.

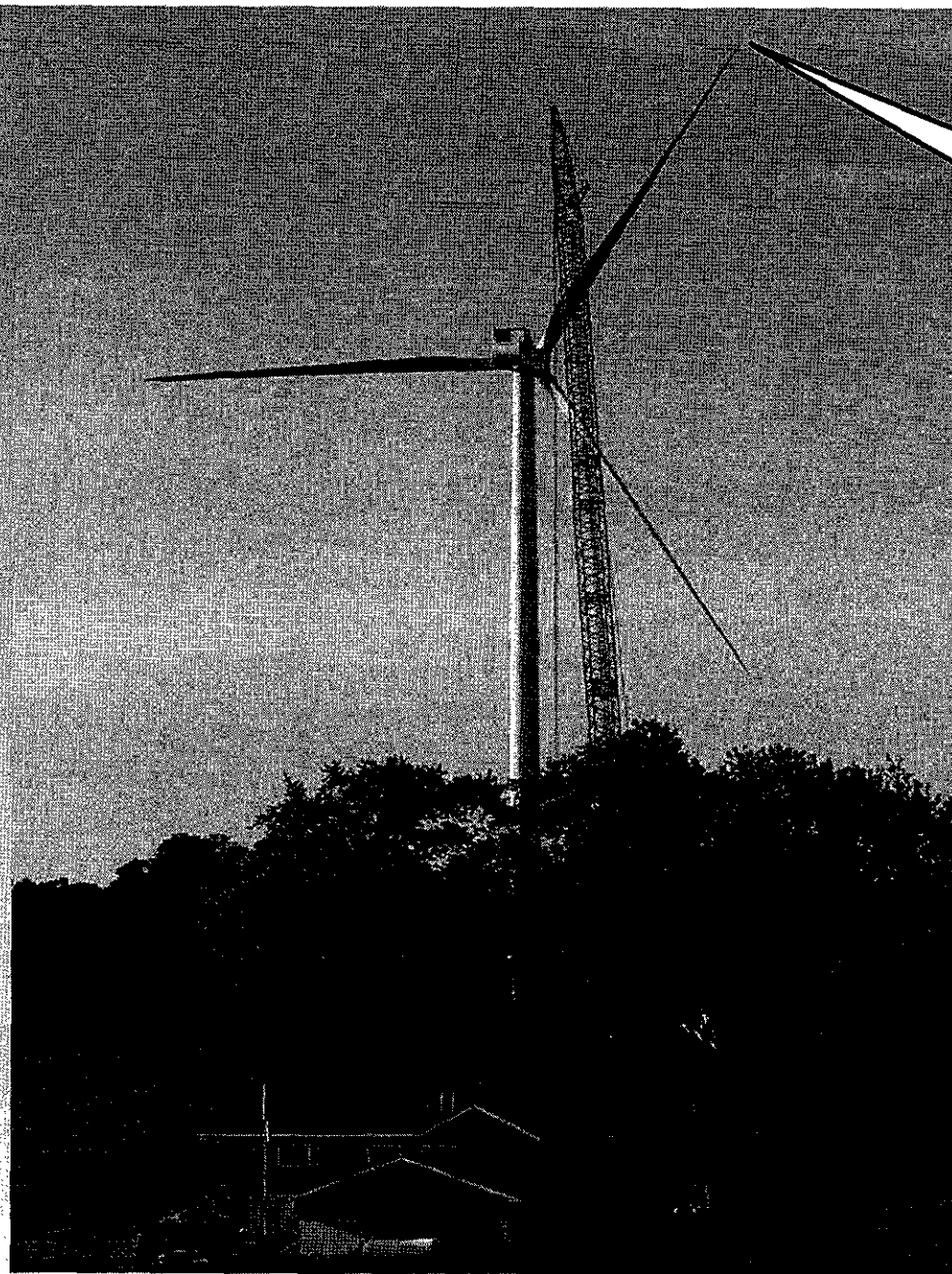
Maschke, C., Niemann, A. Health effects of annoyance induced by neighbour noise. *Noise Control Eng. J.* 55 (3), 2007 May-June.

PROPERTY VALUE IMPACT & ZONING EVALUATION

**Industrial Scale Wind Energy
Mason County, Kentucky**

- Requested by -
Citizens Voice of Mason County

McCann Appraisal & Consulting, LLC
May 12, 2014



476 ft.. height

1,139 ft.. setback

Mason County, Kentucky



Qualifications

Michael S. McCann, CRA

- Over 30 years experience appraisal & consulting
- State Certified General Appraiser, licensed multiple states
- Certified Review Appraiser (CRA)
- Member – Lambda Alpha International - Inducted on basis of expertise with Property Value Impact Studies
- Qualified & testified as expert witness in 21+ state & federal courts
- Appraised variety of property value damage situations
- Consultant to governmental bodies, developers, corporations, attorneys, investors and private owners
- Appointed by Federal Court as a Condemnation Commissioner
- Evaluated & consulted 20+ utility scale wind projects in over a dozen states
- Prepared and presented a webinar regarding wind turbine impacts on property values for the **Appraisal Institute** – peer reviewed & approved for continuing education of Members

McCann Study

- ✓ Review of Mason County Ordinance, Purpose, Conditional Use approval criteria
- ✓ Review of existing character of Project area
- ✓ Review of nuisance factors and stigma typically associated with nearby wind projects, established by existing residential uses
- ✓ Review of prior McCann empirical value studies
- ✓ Literature review - wind projects impact on property values

MASON COUNTY LAND USE MANAGEMENT ORDINANCE

202 PURPOSE

- to promote public health, safety, morals, and the general welfare of Maysville and Mason County, Kentucky;
- to facilitate orderly and harmonious development and preserve the visual or historical character of the area; and
- to regulate the density of population and the intensity of land use in order to provide for adequate light and air.

ARTICLE IV

THE USE OF LAND AND STRUCTURES

- Preserve and protect the aesthetic quality, natural beauty, and character of the land and the natural resources.
- Preserve, enhance, and protect the character and quality of life of the community.
- Promote and protect the safety of the public against fire, flood, or other hazards.
- Encourage the best possible use of the land while avoiding the undesirable effects of overcrowding, congestion, and mixture of incompatible uses.

CONDITIONAL USE PERMITS

- **403.2** The board may approve, modify, or deny any application for a conditional use permit. If it approves such permit, it may attach necessary conditions
- The board shall have the power to revoke conditional use permits, or variances for non-compliance with the condition thereof.

Consideration of Appropriate Conditions

- **Height** – 400 -500 ft. typically proposed; *wind energy can be generated with much less height.*
- **Hours of Operation** – 24/7 typically proposed; *Most nuisance, noise and health complaints are during normal sleep hours.*
- **Setbacks** - Industry claims “standards” of ¼ mile or less; *experience proves these are too close, via property value diminution, noise, flicker, aesthetics, health complaints, blade/ice “throw”, etc.*

Value Loss – Cause?

- Detrimental Condition
- Impairment of quiet use and enjoyment
- Bona fide nuisances & health impacts
- Aesthetics
- Stigma – “Market Resistance”
- Any trespass or intrusion of excessive noise, contaminants, odor, vibration, glare, flicker or other physical impacts into, through or over neighboring property

Property Value Studies

**Independent
McCann & other independent
professional appraisers**

**Industry
Academic Institutions funded by USDOE
and wind energy developers**

Recognized Methodology

- ***Real Estate Damages – An Analysis of Detrimental Conditions*** (pg. 19 -22), recognized methods of applying a Detrimental Condition Sales Comparison Approach includes the use of a Sale/Resale analysis or a Paired Sale Analysis.
- **Regression studies** not reliable for damage estimates, per IAAO Standards for use of Regression analysis.

2009 McCann Lee County Study

Sales > 2 miles

16	1310 Melugins Grove	Apr 2004	\$179,000	Lyons	Overton	2	1,952	\$91.70
17	2612 Shady Oaks Rd	Apr 2003	\$131,000	Smith	Papleach	1.5	1,208	\$108.44
18	3448 Cyclone Rd.	Mar 2003	\$105,900	Munyon	Pippenger	2	1,456	\$72.73
19	2524 Johnson St.	Aug 2004	\$61,800	Copeland	Lampson	1.5	948	\$65.19
20	741 Third St.	Feb 2004	\$63,500	Eckhardt	Rosales	1.5	888	\$73.16
21	613 Church Rd.	May 2003	\$115,000	Merkel	Parpart	1.5	1,458	\$78.88
22	3435 Willow Creek	Jun 2003	\$118,000	Swiatek	Brydun	2	884	\$133.48
23	3021 Cottage Hill	Mar 2005	\$182,000	Russ	Curtis	1.5	1,239	\$146.89
24	3385 Willow Creek	Mar 2003	\$180,000	McCoy	Carver	2	2,840	\$63.38
25	745 Second St.	Dec 2004	\$69,000	Wilson	Calderon	1.5	1,161	\$59.82
26	761 4th St.	Mar 2003	\$68,000	Stewart	Etlinger	1	724	\$93.92
27	2774 Welland Rd.	Apr 2003	\$93,000	Batha	Crumpton	1.5	1,104	\$84.24
28	558 Earlvile Rd.	Jan 2003	\$145,000	Hodge	Keller	2	1,280	\$113.28
29	2505 Wood St.	Aug 2004	\$105,000	Janiak	Bullock	2	1,812	\$57.95
30	385 Earlvile Rd.	Aug 2004	\$280,000	Rago	Dahl	2	2,142	\$130.72
31	3095 Cyclone Rd.	Dec 2004	\$169,900	Summerhill	Rainbolt	2	2,048	\$82.96
32	742 Second St.	Jan 2003	\$103,000	Delhotel	Stewart	2	1,876	\$54.90
33	305 Angling Rd.	Mar 2006	\$119,000	BMV Prop.	Herendeen	1	690	\$176.00
34	2515 Wood St.	Apr 2004	\$80,000	Jones	Sarver	1	912	\$87.72
35	1218 Locust Rd.	Jan 2005	\$169,000	Wachowski	Gembek	1	1,040	\$162.50
36	901 Melugens Grove	Aug 2003	\$228,000	Kidd	Rajan	1	2,000	\$114.00
37	1490 German Rd.	Aug 2004	\$85,000	Fink	Challand	2	2,144	\$39.65
38	603 Ogee Rd.	Apr 2004	\$285,000	Anderson	Miller	1	1,920	\$148.44
39	546 Carnahan Rd.	Jan 2005	\$110,000	Colley	Sarabia	1	1,296	\$84.86
40	1353 County Line	Nov 2003	\$185,000	Vallejo	Bozaeth	1.5	1,338	\$138.27
41	2512 Johnson St.	Feb 2005	\$123,000	Montavon	Sutton	2	2,232	\$55.11
42	2509 Herman Rd.	Apr 2004	\$142,900	Bresson	Arjes	1	1,404	\$101.78
43	955 Woodlawn	Jul 2003	\$265,000	Swan	LaRosa	1.5	1,918	\$138.16
44	1279 Locust Rd.	Mar 2003	\$270,000	Witte	olin	1	2,156	\$125.23
45	648 Ogee	Nov 2003	\$225,000	Fickenscher	Rojas	1	1,768	\$127.26
46	1339 Woodlawn Rd.	Sep 2003	\$230,000	Howell	Bamhill	1	1,701	\$135.21
47	1349 Woodlawn Rd.	May 2003	\$207,500	Howell	Wiskari	1	1,809	\$114.70
48	711 O'Gee Rd.	Aug 2004	\$185,000	Groevengood	Carabal	1	1,352	\$136.83
49	1295 Locust Rd.	May 2004	\$300,000	Hagan	Lowe	1	2,672	\$112.26
50	860 Paw Paw Rd.	May 2004	\$185,000	Wiskur	Pogreba	1	1,148	\$161.15
51	3011 Honeysuckle	Mar 2005	\$355,000	Abbott	Brandt	2	3,655	\$97.13
52	489 Earlvile Rd.	Nov 2004	\$165,000	Schlatke	Fromhertz	2	1,400	\$127.86
53	2512 Shaw Rd.	Jun 2004	\$153,500	Hlavin	Kapinski	2	1,038	\$93.71
Average sale price								\$104.72

Sales located within 2 miles

Sale #	Address	Sale Date	Price	Grantor	Grantee	Style	Size SF	\$/SF
1	629 W. Chestnut	Oct 2003	\$37,000	Estes	Lips	1.5	1,161	\$31.87
2	323 W. Chestnut	Oct 2004	\$40,000	Reed	Hovious	1.5	1,425	\$28.07
3	1019 Steward Rd.	May 2003	\$40,000	Houle-Ward	Reyns	2	1,408	\$28.41
4	91143 Paw Paw	Mar 2005	\$187,000	Zaylik	Pachero	2	1,571	\$119.03
5	1224 IL Rte. 251	Jun 2003	\$138,000	Gittleson	Kowalski	2	1,272	\$108.49
6	339 Chestnut St.	Jan 2003	\$72,000	White	Flynn	2	1,684	\$42.76
7	630 W. Chestnut	Sep 2003	\$126,000	Eddy	Morath, Sr.	1.5	1,728	\$72.92
8	427 Chestnut St.	Oct 2003	\$87,000	Hesik	Rourke, Jr.	1.5	1,380	\$63.04
9	138 Cherry St.	Sep 2004	\$80,000	Hammond	Alexander	1.5	1,326	\$60.33
10	536 W. Cherry	Oct 2004	\$63,500	Johnson	Fitzpatrick	1.5	999	\$63.56
11	885 Compton Rd.	Oct 2004	\$68,900	Boysen	Gellings	1	480	\$143.54
12	518 W. Cherry St.	Apr 2003	\$87,500	Allen	Beckman	1	927	\$94.39
13	222 Maple St.	Dec 2004	\$150,000	Clark	Cummings	1	1,852	\$80.99
14	444 W. Main St.	Mar 2005	\$109,900	Miller	Michaels	1	1,402	\$78.39
15	2874 Beemerville	Jul 2003	\$367,000	Finkboner	DGNB TRT	1	2,201	<u>\$166.74</u>
Average sale price								\$78.84

2009 Study Summary

Avg Sale Price > 2 miles = \$104.72 SF

Avg Sale Price < 2 miles = \$ 78.84 SF

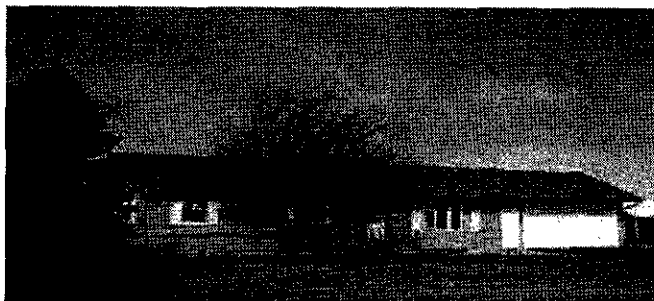
Difference in Sale Price = \$ 25.89 SF

Average Value Diminution Within 2
miles of turbines **25%**

McCann 2012 Study Lee & DeKalb Counties

- Detailed Paired Sales analysis
- Target & Control sale data selected on basis of sales near turbines (Target) being paired with comparable sales (Control) at much greater distances
- Target sales average distance = 2,618 feet
- Control sales average distance = 10.1 miles
- Current empirical data finds 23% to 33% (**avg. 26%**) impact from inadequate setbacks

**DeKalb County Paired Sale #3
1-T & 3-C**



Near Turbines = Target



Far from Turbines = Control

<u>Category</u>	<u>DeKalb Sale 1-T</u>	<u>DeKalb Sale 3-C</u>	<u>Adjustments + (-)</u>
Address	13801 Tower Rd., Lee, IL	27779 Five Points Rd., Sycamore, IL	
Turbine Distance	1,000 ft. approx. from NWC property line	11.7 miles SW of property	
CDOM	712 days; 3 listings	409 days	
OLP	\$275,000	\$239,900	
SP/OLP %	51%	90%	
Sale Date	Nov. 2012	Feb. 2012	
Sale Price	\$140,000	DeKalb (7%) X 9 months = (5.25%) \$215,000	(\$11,300)
GBA/SF	1,439	1,507	
\$/SF	\$ 97.29	(Difference not relevant) \$ 142.67	0
Built	1979	1966 (13 yrs older X 1/2% per yr deprec) =	6.50% \$ 13,975
Tot/BR/B	5 rm/3 br/1 bth	6 rm/3 br/ 1 bth (Dining Room)	\$ (2,000)
Basement	2 br's, fam rm, bath	full, unfinished (+ \$10/sf for subj. finish bsmt)	\$ 15,070
Garage	2 car attached	2 car attached	0
Acres	5	4.18 at \$10k/acre	\$ 8,200
Out Bldgs	4	1 (Est. contribution of 3 bldgs)	\$ 10,000
Quality	Avg.	Avg.	0
Condition	Avg.	Avg.	0
		Net Adjustments	\$ 33,945

Unadjusted Sale Price Analysis

Actual Sale Price Far Sale	\$215,000
Actual Sale Price Near Sale	<u>(\$140,000)</u>
Difference	(\$75,000)
% Difference	-34.9%

Adjusted Sale Price Analysis

Adjusted Sale Price (MV of near sale)	\$ 248,945
Near Sale Price	<u>\$ (140,000)</u>
Indicated Turbine Value Impact to Near Sale	\$ (108,945)
Impact %	-43.8%

Paired Sale Analysis Summary

Lee County Study Area

Pair #	Target Area				Control Area				Impact %
	T#	Distance Feet	CDOM	SP/LP %	C#	Distance Miles	CDOM	SP/LP %	
1	1-T	7,860	535	71.4	1-C	10.0	55	100.0	(27.0)
2	1-T	7,860	535	71.4	2-C	16.0	167	87.2	(30.3)
3	2-T	1,469	1,041	70.0	3-C	11.7	544	90.0	(11.9)
4	2-T	1,469	1,041	70.0	4-C	16.3	176	101.0	(24.0)
5	3-T	3,660	339	71.0	3-C	11.7	544	90.0	(15.5)
6	3-T	3,660	339	71.0	4-C	16.3	176	101.0	(25.6)
7	4-T	315	625	82.0	5-C	4.0	241	82.0	(22.5)
8	4-T	315	625	82.0	6-C	4.8	601	94.0	(23.1)
Lee Averages		3,326	635 1.74 yrs	73.6		10.5	297	92.4	(22.5)

DeKalb County Study Area

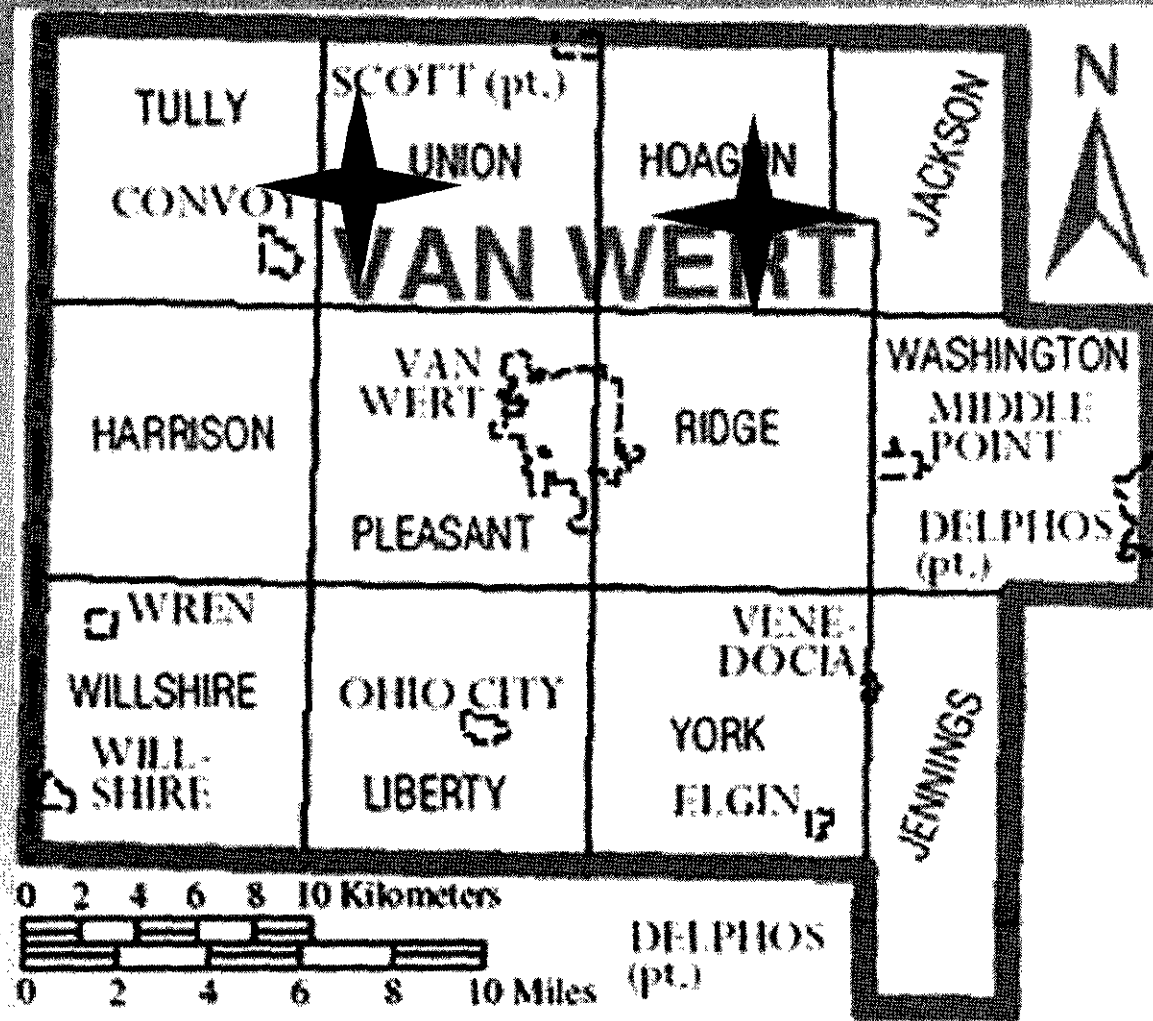
1	1-T	1,000	712	51.0	1-C	10.3	138	90.0	(46.9)
2	1-T	1,000	712	51.0	2-C	5.0	1	95.0	(41.6)
3	1-T	1,000	712	51.0	3-C	11.7	409	90.0	(43.8)
4	2-T	2,139	815	75.0	4-C	11.4	379	81.0	(15.9)
5	3-T	1,880	386	74.0	4-C	11.4	379	81.0	(15.6)
DeKalb Averages		1,637	638 1.75 yrs	66.7		9.6	232	89.0	(32.8)
Lee & DeKalb combined		2,618	636	70.6		10.1	271	91.0	(26.4)

Note: Averages reflect each Target & Control Sale 1 time each, except for Impact %.

Related Study Results

- CDOM is 1 year longer near turbines
- Sale Price as a % of list price is 70.6% near vs. 91% far from turbines
- DeKalb FPL turbines are larger and nearer Target residential sales, on average, and empirical appraisal results find greater impact with shorter Setbacks
- LBNL & Hinman claim that values “rebound” is false. McCann 2003-2005 & 2012 study periods in Lee County find consistent long term value impairment

McCann 2012 Study Van Wert County, Ohio



Van Wert County, Ohio 2012 Real Estate Sales Summary

Township	# Sales	# Sales via Foreclosure	% via Foreclosure	Avg. Price*	Avg. \$/Sq Ft*	Setting
Van Wert	11	1	9%	\$78,980	\$41.08	>6 miles away
Union	15	7	47%	\$58,417	\$31.97	Turbine Footprint
Willsboro	+ 4	+ 6	+38%	(\$20,563)	(\$9.11)	
% Difference				(26%)	(22%)	

Falmouth, MA Value Diminution

	Sale Price \$ / Sq. Ft.	Indicated Discount % VS. Comp Data	Indicated Discount \$/Sq. Ft.
833 W. Falmouth Hwy, Falmouth, MA	\$199.77		
62 Nye Rd. Falmouth, MA	\$294.12	32%	\$94.35
Falmouth Average	\$272.29	27%	\$75.52
Barnstable Average	\$261.69	24%	\$61.92
Avg. Discount		27%	\$77.26

Analysis

833 W. Falmouth Hwy has a clear view of the turbines, and is a sale that is contemporary with the paired sale at 62 Nye Rd. It is also compared to Falmouth & Barnstable County average sale prices per square foot.

Comparison reveals that the 833 Falmouth Hwy property, located in close proximity to the Wind 1, 2 and Webb turbines has sold for a discounted or below market price, despite its superior historic appeal, a 1.1 acre lot size (larger than typical) and a 199 day marketing time. It is also noted that 833 Falmouth Hwy home had been previously marketed and withdrawn, for a total time from beginning to end of marketing efforts of about 37 months.

All indicators reflect a market derived discount from 24% to 32%, and average 27%. However, if the 833 Falmouth sale is adjusted down by \$50,000 for the additional value of the larger lot, the indicated discount increases to 37% compared to Falmouth market average.

LANSINK RESALE STUDY SUMMARY

**Conclusion: Clear Creek, known as
Frogmore-Cultus-Clear Creek, about 18
Wind Turbines**

1	1480 Lakeshore Road, Norfolk	-44.17%
2	71 Norfolk County Road 23, Norfolk	-55.18%
3	47 Concession Road A, Norfolk	-22.47%
4	43 Old Mill Road, Norfolk	-32.96%
5	1575 Lakeshore Road, Norfolk	-27.67%
6	1527 Lakeshore Road, Norfolk	-28.88%
7	1921 Lakeshore Road, Norfolk	-38.48%
Median		-32.96%
Average		-35.69%
Low		-22.47%
High		-55.18%

**Conclusion: Melancthon, 133 Wind
Turbines**

1	375557 6th Line, Amaranth	-48.27%
2	97121 4th Line, Melancthon	-58.56%
3	504059 Highway 89, Melancthon	-23.24%
4	582340 County Road 17, Melancthon	-26.66%
5	582328 County Road 17, Melancthon	-37.30%
Median		-37.30%
Average		-38.81%
Low		-23.24%
High		-58.56%

Lansink Resale Study - 2012

Sale and Resale, Property: 504059 Highway 89, Melancthon

The average Orangeville & District Real Estate Board Residential MLS® price January 2007 was \$254,803 and August 2009 when 504059 Highway 89, Melancthon resold the average price was \$302,550 resulting in a Change of 18.74%.	Average Price January 2007	\$254,803
	Average Price August 2009	\$302,550
	\$Change	\$47,747
	%Change	18.74%
The property, 504059 Highway 89, Melancthon, was purchased by Canadian Hydro Developers, Inc. in January 2007 for \$305,000 but would have resold August 2009 for \$362,153 as a result of the passage of time.	Actual Price January 2007	\$305,000
	%Change	18.74%
	\$Change	\$57,153
	Adjusted Price August 2009	\$362,153
However the Actual Price when the property resold to Egresits / Gooder in August 2009 was \$278,000, a loss of -\$84,153.	Actual Price August 2009	\$278,000
	\$Difference	-\$84,153
	%Difference	-23.24%
Diminution in Value: -23.24%.		

LITERATURE REVIEW

Summary Wind Turbine - Property Value Impact Studies						
Independent Studies						
Author	Type	Year	Location	Method	Distance	Impact %
Lansink	Appraiser	2012	Ontario	Resale (1)	< 2 miles	(39%) Avg. 23%- 59%
Sunak	Academic RWTH Aachen University	2012	Rheine & Neuenkirchen	OLS Geographic Weighted Regression (2)	2 Km	(25%)
Heintzelman Tuttle	Academic Clarkson University	2011	Upstate NY	Regression Resale & Census Block	1/10 to 3 miles	Varies to > (45%)
McCann	Appraiser	2009 -2013	Illinois, (3) MI, MA, WI, OH	Paired Sales & resale	< 2 miles	(25%) 20% - 40%
Gardner	Appraiser	2009	Texas	Paired Sales	1.8 miles	(25%)
Kielisch	Appraiser	2009	Wisconsin (4)	Regression & Survey	Visible vs. not visible	(30- 40%) (24- 39%)
Luxemburger	Broker	2007	Ontario	Paired Sales	3 NM	(15%) \$48,000
Lincoln Twp.	Committee (5)	2000- 2002	Wisconsin	AV ratio 104% v. 76%	1 mile	(28%)

Wind Industry Funded Studies						
Canning & Simmons	Appraisers (CANWEA)	2010	Ontario	Regression Paired Sales	Viewshed (6)	(7%-13%) (9%) No SS
Hinman	Academic ISU - REP Student thesis	2010	Illinois	Pooled Regression Realtor survey	3 miles ½ mile	No SS (11.8%) (7)
Hoen	USDOE funded LBNL	2009	9 states	Pooled regression	5 miles 3k ft – 1 mile	No SS (5.6%) (8)

Footnotes:

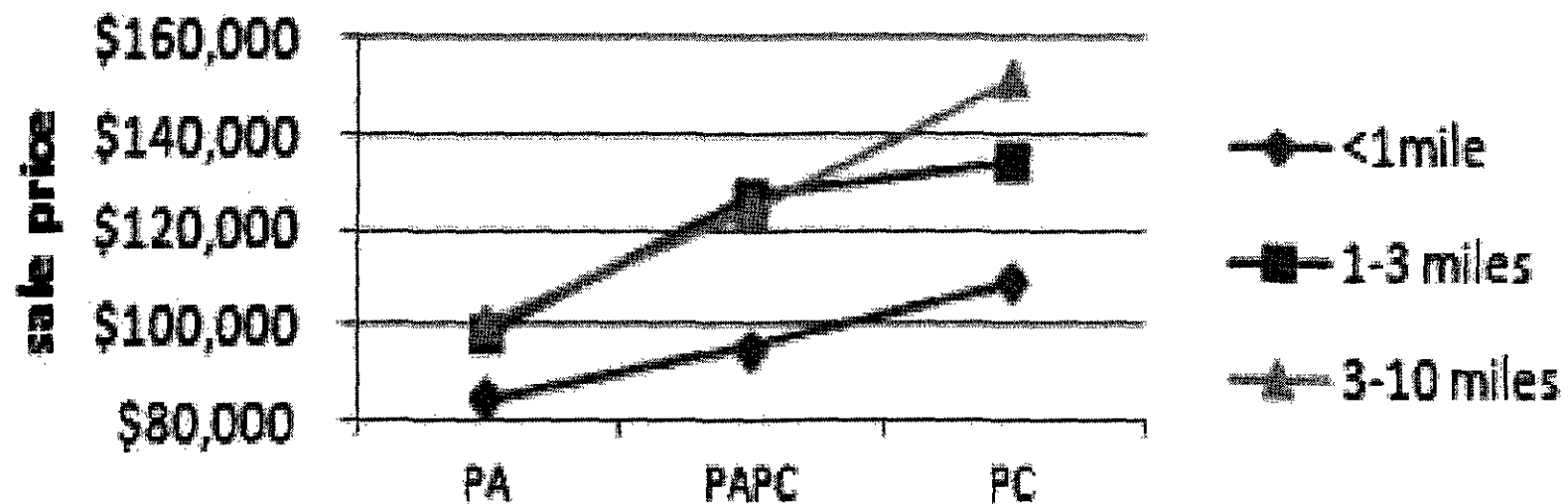
- (1) Lansink Resale study uses resales from developer to private buyers, with Easement in Gross condition of sale. Buyer accepts noise impacts, etc., waives liability
- (2) Lots only. No pooling of data
- (3) McCann Illinois study & research updated, multiple states
- (4) Kielisch regression lot sales; Realtor survey residential
- (5) Committee compared actual sale prices vs. AV and found homes up to 1 mile sold @ 76% of AV, and > 1 mile @ 104% of AV
- (6) Usually cited as being a study that found no impact. However, all methods used yielded negative numeric indication. Author concludes no statistical significance.
- (7) Cites Realtor who believes no impact on value > 3 miles. Concludes some results indicate "wind farm anticipation stigma" (11.8%)/Pg.55. Author states "the results neither support nor reject the existence of a wind farm nuisance stigma after the wind farm achieved commercial operation.....likely due to only 11 properties selling during operations within 1 mile of wind farm." Good neighbor payments to some nearby neighbors. Values near wind farm appreciated \$13,524 after operation, following \$21,916 decline measured under anticipation stigma theory. (Net loss of \$8,392 pre- vs. post operation./Pg. 120.
- (8) Study excludes developer resales with 36% & 80% discounts from buyout price. Pooled data from 9 states 24 projects insures lack of statistical significance for value loss examples near turbines. Other sales nearby excluded due to deviation too far from mean and resale.

Recent Studies

- LSE -11% impact. Academic regression study
- UCON/LBNL/- (Massachusetts Clean Energy Center)
(Does not mention scores of lawsuits and thousands of neighbor complaints) No Statistical significance found. .80 R^2 . IAAO standard for reliability is .90 or >
- LBNL, 8/2013: *“Therefore for the purposes of this research we will assume 3-4% is a maximum possible effect.”* $R^2 = .67$

Sale Price

	<1mile	1-3 miles	3-10 miles
PA	\$ 84,830	\$ 98,676	\$100,485
PAPC	\$ 95,223	\$127,054	\$124,532
PC	\$109,133	\$134,647	\$151,559



LBNL 8/2013

Value Change - PA	PC	Difference
3-10 miles	\$100,485	\$151,559 \$51,074 50.8%
< 1 mi.	\$ 84,830	\$100,485 \$15,655 <u>18.5%</u>

Value change is lower by margin of **32.3%**

- Original LBNL 2009 report excluded resales that showed 36% & 80% value loss. 2013 conclusions similarly not supported by empirical data analysis

Impact of Industrial Wind Turbines on Residential Property Assessment In Ontario

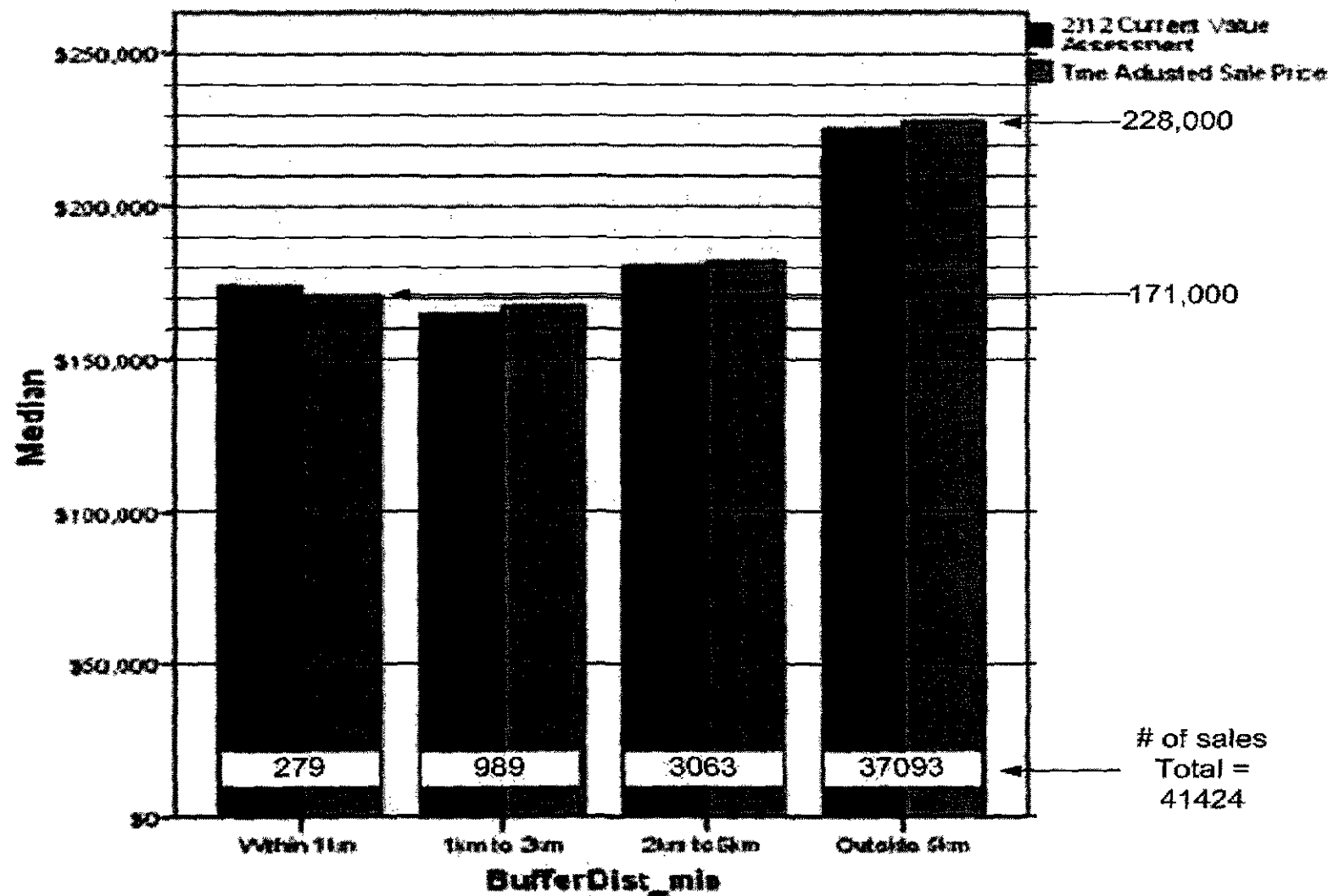
2012 Assessment Base Year Study



MUNICIPAL
PROPERTY
ASSESSMENT
CORPORATION

www.mpac.ca

MPAC STUDY DATA



VALUE IMPACT SUMMARY

MPAC STUDY DATA

(Time Adjusted Sales - Appendix D2)

Setback km	# Sales	Median Sale Price	\$ Impact	% Impact
1 or <	279	\$171,000	\$57,000	25.0%
1 to 3	989	\$168,000	\$60,000	26.3%
3 to 5	3,063	\$180,000	\$48,000	21.1%
> 5	37,093	\$228,000	Control Setback	

Conclusions

- ✓ Setbacks of less than 2-3 miles are inadequate to avoid significant loss of value, or impaired use & enjoyment of neighboring property
- ✓ If Projects are approved as typically proposed, the most proximate residential properties will experience a range of value impact from (25%) at 2-3 miles, to (40%) typical setback ranges proposed by developers
- ✓ Wind Energy Projects do not meet the requirements of the Mason County Land Use Management Ordinance with respect to Conditional Use, real estate value and compatibility related issues

Basis for Professional Opinions

- ✓ Independent studies consistently find significant value diminution
- ✓ Appraisal studies are superior
 - Focus on **paired sale** data, **resale** studies, “nearby” data
- ✓ Wind Industry commissioned studies use only regression analysis
- ✓ Data “pooling” assures no statistical significance of any value loss examples
- ✓ Non-appraisers do not comply with USPAP, on several levels
- ✓ Industry favored LBNL study found to not be reliable for any public policy purposes
- ✓ **Court decision rejected regression by value witness**
- ✓ Clarkson & Sunak studies use regression, but do not pool data
- ✓ Value loss conclusions are statistically significant
- ✓ Clarkson useful for distances as near as 1/10 mile
- ✓ McCann and other studies collectively find that proximity impacts values (25%) to (40%)

Common Sense

- Market resistance to buying a home in an overwhelming industrial setting
- Sellers often under duress, due to noise, health impacts, nuisance and "invasion" of turbine impacts
- Discounts derived from market are comparable to other duress conditions, i.e., foreclosure sale, liquidation, estate sale with short marketing, auction of undesirable or "problem" property.

Ben Hoen Interview

....You might know about a Property Value Guarantee. It's a dicey situation and complicated, but I think homes that are very close, there is just too much unknown right now; that seems reasonable. I think one of the things that often happens is that (wind) developers put our report forward and say look property values aren't affected, and that's not what we would say specifically. On the other hand, they have little ground to stand on if they say we won't guarantee that.

Reported by:
Clif Schneider

April 12, 2010 – recorded interview available online

PVG - Key Elements

- ✓ Owners left “whole”, regardless of whether they sell or stay.
- ✓ No hurdles to being included. Property rights for 2nd homes, AG land, etc. are not immune from devaluation.
- ✓ Buyout provision in the event that a property is unmarketable after “typical” marketing period for area with no turbines visible.
- ✓ Administration of PVG by unbiased 3rd party (*Panel appointed by PVA? Could include a retired judge, lawyer and professional appraiser*).
- ✓ Automatic coverage of property within 2 to 3 mile range.
- ✓ Extend PVG range if/when ILFN or other noise nuisance is A) reported by owner/occupant & B) measured by independent acoustician retained by PVG panel.
- ✓ Bonding and/or insurance to cover 25% of value within 3 miles.
- ✓ Language to prevent need for neighbors to file litigation. PVG panel should be final arbitration.

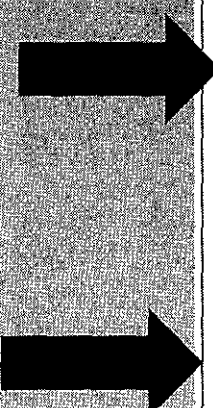
SCHEDULE

TRANSFER OF EASEMENT IN GROSS

Transferor: Malcolm Keith McDonald

Transferee: Canadian Hydro Developers, Inc.

Re: Part Lot 29, Concession 5, Part 1 on Plan 7R787, Amaranth (PIN: 34055-0033 (LT))



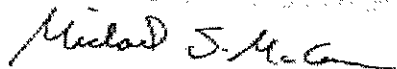
The Transferor hereby transfers, sells, grants, and conveys to the Transferee, to use and enjoy for the benefit of the Transferee, the right, liberty, privilege, and free and unencumbered easement (hereinafter "Easement") in perpetuity commencing on the date hereof, over, along, and upon the Transferor's Lands for the right and privilege to permit heat, sound, vibration, shadow, flickering of light, noise (including grey noise) or any other adverse effect or combination thereof resulting directly or indirectly from the operation of the Transferee's wind turbine facilities situated on the Transferee's leasehold interests located within the Townships of Melancthon and Amaranth, in the County of Dufferin, for the Transferee's Melancthon EcoPower Centre, which shall include but not be limited to any and all options to lease and lease agreements and any renewals, extensions, amendments or replacements thereof, in any abutting, adjoining, neighbouring or other lands (hereinafter, collectively, the 'Leasehold Lands'). The Transferor further acknowledges and agrees that the operation of the Transferee's wind turbine facilities located on the Leasehold Lands may affect the living environment of the Transferor and that the Transferee will not be responsible or liable for, of and from any of the Transferor's complaints, claims, demands, suits, actions, or causes of action of every kind known or unknown which may arise directly or indirectly from the Transferee's wind turbine facilities on the Leasehold Lands to the extent permitted by this Easement. In addition, the Transferor hereby covenants and agrees to indemnify, defend, and hold harmless the Transferee from any and all liabilities, claims, demands, costs and expenses arising from any direct, indirect or consequential damages arising out of a complaint, claim, action or cause of action initiated by the Transferor as against the Transferee for anything permitted by this Easement in relation to the Transferee's wind turbine facilities located on the Leasehold Lands.

This Easement and all acknowledgements contained herein shall enure to the benefit of and be binding upon the Transferor and Transferee and their respective heirs, executors, successors, servants, agents and assigns, as the case may be. This Easement will also be registered on title and shall remain with the Transferor's Lands.

This is an easement in gross.

CERTIFICATION

- The undersigned, representing McCANN APPRAISAL & CCONSULTING, LLC, do hereby certify to the best of our knowledge and belief that:
- FIRST: The statements of fact contained in this consulting report are true and correct.
- SECOND: The reported analyses, opinions and conclusions are limited only by the reported assumptions and limiting conditions and represents the personal, impartial and unbiased professional analyses, opinions, and conclusions of the undersigned.
- THIRD: We have no present or prospective interest in the property that is the subject of this report and no personal interest with respect to any of the parties involved.
- FOURTH: We have no bias with respect to the property that is the subject of this report or to the parties involved with this assignment.
- FIFTH: Our engagement in this assignment was not contingent upon developing or reporting predetermined results.
- SIXTH: Our compensation for completing this assignment is not contingent upon the development or reporting of a predetermined value or direction in value that favors the cause of the client, the amount of the value opinion, the attainment of a stipulated result, or the occurrence of a subsequent event directly related to the intended use of this appraisal.
- SEVENTH: Our analysis, opinions, and conclusions were developed, and this report has been prepared in conformity with the Uniform Standards of Professional Appraisal Practice.
- EIGHTH: Prior to testimony, a physical inspection was made by McCann Appraisal, LLC of the property that is the subject of this report. The undersigned also utilized photographs, maps and property record card data for characterizing and understanding the character of the subject property.
- NINTH: No one other than the undersigned provided significant real property appraisal assistance to the person signing this certification.
- TENTH: The undersigned, McCann Appraisal, LLC has not previously consulted and testified regarding the subject property.
- IN WITNESS WHEREOF, THE UNDERSIGNED has caused these statements to be signed and attested to.



Michael S. McCann, CRA
State Certified General Real Estate Appraiser
License No. 553.001252 (Expires 9/30/2015)

Butler, Matthew

From: Valerie Malicki <valeriechristina@rocketmail.com>
Sent: Friday, August 22, 2014 4:33 PM
To: Puco ContactOPSB; Valerie Malicki
Subject: falsehoods
Attachments: windturbinesyndrome.com-
Imagine_being_bombarded_day_amp_night_by_volleys_of_acoustic_artillery_much_of_it_low_frequency_and_i.p

Categories: Red Category

Dear OPSB,

DR. PIERPONT WRITES (HER AMAZING CREDENTIALS --PRINCETON, YALE, JOHNS HOPKINS MEDICAL SCHOOL -- HAVE ALREADY BEEN DOCKETED):

In medicine, we clinicians are morally bound to exercise what's called the "precautionary principle." That is, if we don't know for certain that a procedure is harmless, we are obliged to exercise extreme caution in performing the procedure, in this instance building industrial wind turbines — which are well-known to produce impulsive (i.e., amplitude-modulated) infrasound — near people's homes. This is, after all, common sense.

For decades, the wind industry flatly denied their turbines produced infrasound. It took monumental efforts by people like me to debunk this fallacy. Wind industry advocates likewise argued that only downwind turbines created noise, that is, low-frequency noise. Dr. Kelley and his research team effectively debunked that falsehood, in the articles referred to above. Finally, the wind industry clung to the fiction that, "If you can't hear it, it can't hurt you." Professor Salt deflated that one.

It's time to recognize that the global wind industry has hidden behind a series of (what turned out to be) falsehoods. Their untruths have been exposed and corrected in the published clinical and scientific literature, as shown above.

There is no excuse for building wind turbines in proximity to people's homes.

REALLY THIS SAYS IT ALL. PLEASE PLACE A MORATORIUM ON ALL WIND PROJECTS UNTIL SAFE SITING MEASURES ARE IN PLACE. YOUR MISSION, AFTER ALL, IS TO PROVIDE "SAFE ELECTRICITY."

PLEASE, FOR THE SAFETY OF FELLOW OHIOANS, DENY THIS CERTIFICATE.

SEE ATTACHED INDEPENDENT RESEARCH, RESEARCH BY SOMEONE WHO DOES NOT WORK FOR THE WIND INDUSTRY.

RESPECTFULLY,

VALERIE C. MALICKI, MA, LPCC