



September 30, 2013

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Sent VIA EMAIL

A Human Species Habitat Witness Statement

RE Middlesex-Lambton Wind Action Group Inc., Harvey Wrightman and Esther Wrightman v. Director, Ministry of the Environment, ERT Case Nos. 13-102, 13-103, 13-104 - LSB No. 13-9781

ERT Case No. 13-102 to 13-104, ENVIRONMENTAL REVIEW TRIBUNAL

IN THE MATTER OF appeals by Middlesex-Lambton Wind Action Inc. ("MLWAG") and Harvey Wrightman and Esther Wrightman (the "Appeals") for a Hearing before the Environmental Review Tribunal (the "Tribunal") pursuant to section 142.1 of the *Environmental Protection Act*, R.S.O. 1990, c. E.19, as amended with respect to Renewable Energy Approval Number 6465- 8XGLQT (the "REA") issued to Kerwood Wind Inc. to engage in the Adelaide Wind Energy Centre by the Director, Ministry of the Environment, on August 1, 2013 and posted on the Environmental Registry on August 1, 2013 under section 47.5 of the EPA, in respect of a Class 4 wind facility consisting of the construction, installation, operation, use, and retiring of a wind turbine facility with total nameplate capacity of 59.9 megawatts and in the Municipality of North Middlesex and the Township of Adelaide-Metcalf, County of Middlesex, Ontario.

A proposed project by NextEra Energy Canada, Adelaide Wind Energy Centre, a 37 wind turbine generator with a total name plate capacity of 60 megawatts (MW).

NOT A LAND VALUE REPORT – A Human Species Habitat Witness Statement

The reader is advised that this report is not a market value estimate; it is not an appraisal pertaining to the value of real estate; and it is not a consulting report.

It is a “Human Species Habitat Witness Statement” relating to dwellings, homes, and yards - the human species habitat.

NOT HEALTH EXPERTS but Experts at Reading the Market Place

Michael McCann and Ben Lansink are not experts regarding the health of persons nor are we experts at determining if a person’s health is affected by neighbouring wind turbines.

However, we are experts at reading the human species habitat market place resulting from decisions made by people living in a neighbourhood affected by wind turbines. The common denominator in our respective studies is that the close proximity of turbines developed near habitats decreases the quality of the local environment for continued residential use, from both current and prospective owner/occupant perspectives. Beyond the visual impacts, noise, flicker and reported health impacts, negatively alter the living environment at ranges and distances that far exceed the Ontario minimum setback of 550 meters.

In fact, many such negative reports extend to two miles or greater and homes subject to setbacks lower than approximately two miles are subject to increased risk, loss of quiet use and enjoyment, and noise and flicker “trespass” onto the residential properties.

TYPICAL COMMENTS: living within the influence of a wind turbine complex

This is my community - people I know, my kids know everyone, it's tight knit. It's something money can't buy.

It's quiet. This is more important to some people than others. For health reasons, sensitivity to noise, it is important to members of my family.

Many rural families work/farm together. We live tightly with each other in our daily lives to make or businesses and family lives run smoothly. If just one person cannot live with wind turbines around them, the whole working/family unit is shattered ...especially if we are forced to move.

RENEWABLE ENERGY APPROVAL

It is noted that NUMBER 8980-95RSLP, Issue Date: August 1, 2013, states:

K7. "The Company shall contact the Ministry of Natural Resources and the Director if any of the following bird and bat mortality thresholds, as stated in the Adelaide Wind Energy Centre Natural Heritage Environmental Effects Monitoring Plan described in Condition K1, are exceeded:"

While we agree that it is very important to protect bird and bat species, and also turtle species, one would have thought it would be equally and more important to protect the human species; hence the human habitat, which is real estate.

By real estate we mean, in this report, properties improved with buildings that house dwellings, homes/houses, surrounding yards, and neighbourhoods - the human habitat.

HARM - Human Species Habitat

Most people have an opinion regarding obsolescence, which in this case is an impairment of desirability and usefulness and the effect on themselves, their surroundings, and their habitat, and on society, as a result of neighbouring wind turbines.

The harm may be real or perceived and it may be different for each habitat and to each property seller and buyer.

This perception results in people making decisions on habitat location as a result of neighbouring wind turbines.

However not all can afford to move; therefore they are forced to remain in their homes notwithstanding it is within the influence of a wind turbine or turbines.

When considering the human habitat, the overall impact of wind turbines can be analyzed by the actions of buyers and sellers acting in an open real estate market place.

MELANCTHON WIND FACILITY – No Value Related Comments¹

TransAlta Corporation owns and operates the Melancthon Wind Facility through its wholly-owned subsidiary Canadian Hydro Developers, Inc. Based in Calgary, TransAlta is a public company listed on the Toronto Stock Exchange.

Canadian Hydro Developers, Inc. constructed Ontario's first utility-scale wind facility consisting of 133 industrial wind turbines producing 200 megawatts of power. Located near Shelburne, Ontario, Canada, the project is known as the 'Melancthon Wind Facility'. This facility has the capacity to generate 545,000 megawatt hours each year and twenty-year Renewable Energy Supply contract is in place with the Ontario Government. The Melancthon Technology is GE 1.5 MW turbines on 80 meter towers. Phase I of the project began commercial operation in 2006, with Phase II beginning commercial operation in late 2008.

A registry search (Ontario's digital registry system) produced several properties that sold in the area, however, only 'dwelling properties' are considered.

Canadian Hydro Developers purchased five properties, each with a dwelling, each within the influence of wind turbines.

When Canadian Hydro Developers, Inc. resold each of the five properties covenants were included in the deed/transfer wherein the buyer waived rights to complain due to noise or other nuisance or living environment issues resulting from wind turbines situated on neighbouring lands.

Each transfer/deed included the following "Transfer of Easement in Gross" covenant:

"...free and unencumbered easement...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..."

"...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"

¹ See www.lansinkappraisals.com, Publications / Studies, Case Study: Wind Turbines – February 2013

“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”.

In each of the five sales, Canadian Hydro Developers, Inc. registered a “Transfer of Easement in Gross”. Following is an example of a typical easement.

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.

Source: Attachment to Deed DC105449

A PRESS ARTICLE FOLLOWS:

Caution to the Wind

Updated Sat. Dec. 27 2008 6:55 PM ET

W-FIVE Staff



Portions of the News Report follow:

Helen Fraser wasn't at the opening of the Melancthon EcoPower Centre. But she's all-too familiar with the turbines. According to Fraser, she and her husband lived just over 400 meters from one of the turbines erected in phase one of the project. At first she had no problem with the fact that a wind farm was coming to her rural area.

"I thought this was absolutely amazing. [I was] all for green" said Fraser. But soon after the 45 meter blades -- longer than the wingspan of a Boeing 737 -- started spinning, she said she knew something was wrong.

"It was like a whoosh sound. It would just go whoosh-whoosh, like a steady beat with it. And there would be times my heart would actually beat to the pulse of the turbine," she recalled.

Even though the turbines' distance from the Fraser's home satisfied the Ontario government's noise guidelines, the sound and strobing effect when the sun was shining through the spinning blades made them too close for comfort - at least for the Frasers.

"I had terrible headaches, body aches. I couldn't sleep at night," said Fraser. "My husband's blood sugar, because he has diabetes, was all over the map." When the couple went away on vacation, they say the problems stopped.

Fraser and her family eventually sold their property to Canadian Hydro Developers, the company behind the wind farm, and their former home sits in the shadow of a giant, spinning wind turbine.

Source: W-FIVE Staff

It is articles, reports, sworn testimonials, and personal experiences of wind turbine neighbours similar to the above, and there have been many, that lead to buyer and seller market-opinion reactions, regardless of whether or not a particular impact is real or perceived. In appraisal literature and texts, neighbouring nuisances or dangers are referred to as “detrimental conditions”. Such conditions are based on external impacts that are perceived by the senses, such as noise, odours, hazards, and in some instances, aesthetic considerations such as views.

An increased perception of impaired habitability and diminished quiet use and enjoyment of the “human species habitat” is an adverse impact on residential uses, occupancy and property and is considered to be an external detrimental condition that would be imposed on neighbouring residents by the turbines if developed and operated.

ENVIRONMENTAL REVIEW TRIBUNAL

Portions of Case Nos.: 13-002/13-003, July 3rd, 2013, follow:

Ostrander Point Wind Energy LP, under section 47 of the *Environmental Protection Act*, regarding the construction, installation, operation, use and retiring of a 9 wind turbine generator, Class 4 wind facility with a total name plate capacity of 22.5 megawatts located within South Marysburgh, Prince Edward County;

- [8] For the reasons given below, the Tribunal concludes that the appellant citizen group APPEC has not met the first branch of the test regarding harm to human health because no causal link has been established between wind turbines and human health effects at the 550 m setback distance required under this REA.
- [50] The Tribunal accepts the findings in *Erickson*, which are unchallenged, that wind turbine noise can cause harm to human health if placed too close to residents.

Tribunal's Summary of Findings

Issue No. 1: Whether engaging in the Project in accordance with the REA will cause serious harm to human health.

[627] The evidence in this proceeding did not establish a causal link between wind turbines and either direct or indirect harm to human health at the 550 m set-back distance required under this REA.

[628] The evidence in this hearing did not establish that engaging in the Ostrander Point wind turbine project in accordance with the REA will cause serious harm to human health.

[629] For these reasons the Tribunal finds that the Appellant has not established that engaging in the Project in accordance with the REA will cause serious harm to human health, and dismisses APPEC's appeal.

Issue No. 2: Whether engaging in the Project in accordance with the REA will cause serious and irreversible harm to plant life, animal life or the natural environment.

Sub-issue 1: animal life

[630] The Tribunal finds that mortality due to roads, brought by increased vehicle traffic, poachers and predators, directly in the habitat of Blanding's turtle, a species that is globally endangered and threatened in Ontario, is serious and irreversible harm to Blanding's turtle at Ostrander Point Crown Land Block that will not be effectively mitigated by the conditions in the REA.

[631] The Tribunal finds that the appellant has not established that engaging in the Project in accordance with the REA will cause serious and irreversible harm to birds or their habitat.

[632] The Tribunal concludes that PECFN has not established that engaging in the Project in accordance with the REA will cause serious and irreversible harm to bats.

[633] The Tribunal finds that PECFN has not established that engaging in the Project in accordance with the REA will cause serious and irreversible harm to Monarch butterflies.

Sub-issue 2: plant life

[634] The Tribunal finds that PECFN has not shown that engaging in the Project in accordance with the REA, (i.e., including the minimum mitigation measures outlined in s. 117 of the REA that must be included in a future ARMP), will cause serious and irreversible harm to alvar plants or the alvar ecosystem at the Ostrander Point Crown Land Block.

[641] The Tribunal is therefore not in a position to alter the decision of the Director, or to substitute its opinion for that of the Director. As a result, the Tribunal revokes the decision of the Director.

Notwithstanding that the Tribunal revoked the decision of the Director due to the irreversible harm to the Blanding's turtle's Habitat that will not be effectively mitigated by the conditions in the REA, the Tribunal seems to have not placed any significance on the irreversible harm to the Human Species Habitat.

Perhaps this is a result of expert evidence presented at the hearing that did not focus on the irreversible harm to the Human Habitat.

MCCANN-LANSINK CONCLUSIONS - Human Species Habitats

In the case of Melancthon, five persons gave up their existing habitat as a result of real or perceived issues directly related to nearby turbine operations. It is reasonable to argue that the five were "forced evictions".

The erection of a wind turbine creates apprehension in the general public, which makes the habitat less desirable for both current and prospective owner/occupants. Continuing scientific uncertainty over the adverse health consequences of wind turbines only serves to perpetuate the debilitating effect of wind turbines on a person's health, real or perceived.

By including the Transfer of Easement in Gross in the deed/transfer of the properties sold by Canadian Hydro Developers, Inc., it is reasonable to conclude that Canadian Hydro Developers, Inc. is fully aware of human habitat problems associated with

"...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 ... wind turbine facilities ...

and that the turbines "**...may affect the living environment...**".

The covenants imposed by Canadian Hydro Developers, Inc. and accepted by the five buyers suggest an official admission by Canadian Hydro Developers, Inc. that there are serious living-environment issues caused by wind turbines.

There will be serious living-environment issues resulting from the construction and use of the Adelaide wind farm, Adelaide Wind Energy Centre, in the form of impaired quiet use and enjoyment and a market “stigma”.

Individuals, families and communities who are facing the prospect of a neighbourhood wind turbine complex, or who are already living within the influence of a wind turbine complex, are never in much doubt about its impact on their lives. People facing the prospect of moving, in their minds a “forced eviction”, are acutely aware of what they stand to lose; so much so that they are often prepared to take enormous risks to their own safety and belongings by resisting the construction and ultimate operation of a wind turbine complex and where possible, trying to negotiate alternative options with the relevant authorities.

Those who are living within the influence of a wind turbine complex already experience those consequences firsthand in their daily lives.

The human habitat will be most negatively affected and the affect is not curable by the habitat owner. Some can move but some cannot move due to financial constraints.

The only cure is not to proceed with the Adelaide Wind Energy Centre or to impose setbacks that far exceed the statutory minimum distance to a distance that is beyond the reported distances and expert opinions of independent acoustic and health experts.

It is most important to protect the human species and therefore the human habitat from the real or perceived adverse health and financial consequences of wind turbines.

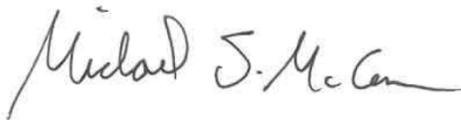
As previously stated, notwithstanding that the Tribunal revoked the decision of the Director due to the irreversible harm to the Blanding’s turtle’s Habitat that will not be effectively mitigated by the conditions in the REA, the Tribunal seems to have not placed any significance on the irreversible harm to the Human Species Habitat.

Certification

The undersigned, representing McCANN APPRAISAL, LLC, does hereby certify to the best of his knowledge and belief that:

- FIRST: The statements of fact contained in this written consulting testimony 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: I have no present or prospective interest in a proposed project by NextEra Energy Canada, Adelaide Wind Energy Centre, that is the subject of this report and no personal interest with respect to any of the parties involved.
- FOURTH: I have no bias with respect to a proposed project by NextEra Energy Canada, Adelaide Wind Energy Centre, 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 opinion that favors the cause of the client, or the occurrence of a subsequent event directly related to the intended use of this report.
- 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: No inspection was made by McCann Appraisal, LLC of the proposed project by NextEra Energy Canada, Adelaide Wind Energy Centre, that is the subject of this report.
- NINTH: Other than the joint opinions developed with Mr. Ben Lansink, no one other than the undersigned provided significant assistance to the person signing this certification.

Michael S. McCann, CRA



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Certification

I, Ben Lansink, and certify to the best of my knowledge and belief that:

The statements of fact contained in this report are true and correct.

The reported analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions, and are my personal impartial, and unbiased professional analyses, opinions, and conclusions. No one provided professional analysis assistance to me, the sole report signer.

I have no bias and no present or prospective personal interest with respect to a proposed project by NextEra Energy Canada, Adelaide Wind Energy Centre, or issues that are the subject matter of this report, or to the parties involved with this assignment. My engagement in and compensation for this assignment were not contingent upon developing or reporting predetermined results, or a conclusion favouring the client.

My analyses, opinions, and conclusions were developed, and this report has been prepared, in conformity with (1) the Canadian Uniform Standards of Professional Appraisal Practice (CUSPAP), Appraisal Institute of Canada; (2) the Uniform Standards of Professional Appraisal Practice (USPAP), Appraisal Standards Board, United States; and (3) the International Valuation Standards (IVS). I have the knowledge and experience to complete the assignment competently.

The Appraisal Institute of Canada has a Continuing Professional Development Program. As of September 30, 2013, I have fulfilled the requirements of this Program. I am a member in good standing of the Appraisal Institute of Canada.

I did not complete an inspection of the proposed project by NextEra Energy Canada, Adelaide Wind Energy Centre.

Ben Lansink, AACI, P.App, MRICS



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RENEWABLE ENERGY APPROVAL

NUMBER 8980-95RSLP

Issue Date: August 1, 2013

SCHEDULE A Facility Description

The Facility shall consist of the construction, installation, operation, use and retiring of the following:

Adelaide wind farm:

- (a) a total of thirty seven (37) out of thirty eight (38) wind turbine generators each rated at a maximum of 1.62 megawatts (MW) generating output capacity with a maximum total name plate capacity of 60 megawatts (MW), designated as source ID Nos. 1 through 38, each with a hub height of eighty (80) metres above grade, and sited at the locations shown in Schedule B, in accordance with Condition C1(2)(b); and
- (b) associated ancillary equipment, systems and technologies including one (1) 85 mega-volt-ampere (MVA) transformer substation, on-site access roads, underground cabling and overhead transmission lines,

Project Switchyard:

- (c) associated ancillary equipment, including switches, breakers, electrical bus work, instrument transformers, grounding, metering equipment, control house and steel structures supporting incoming and outgoing transmission line circuits,

Parkhill interconnect:

- (d) associated ancillary equipment, systems and technologies including one (2) 225 mega-volt-ampere (MVA) transformer substation, on-site access roads, underground cabling and overhead transmission lines,

all in accordance with the Application.

ADDITIONAL WITNESS STATEMENTS by

Michael S. McCann and Ben Lansink.

In addition to this Human Species Habitat Witness Statement report, both witnesses have developed independent opinions, and have subsequently peer reviewed the supporting work of the other. Each witness can also address their own studies. McCann can also address a literature review of a number of studies, as cited within previous reports and presentations prepared by McCann. Lansink can also address the impact of other Project facilities, i.e., HVTL towers and substations.

BACKGROUND AND AREA OF EXPERTISE

1. Per attached professional biographies, both experts have decades of experience in reading the open market place regarding the impact of detrimental conditions of one land use upon other neighboring uses. In recent years, both experts have undertaken specific studies on an independent basis, which objectively analyzed the empirical sale data and market trends for homes which have had large scale turbine developments approved, constructed and operated in close proximity to the residential uses.

The data analyzed and recognized methodology employed by both experts is also contained within previous reports and documents.

DOCUMENTS REVIEWED

2.
 - a. Case Studies Clear Creek Melanchthon Wind Turbines (October, 2012, Ben Lansink)
 - b. McCann Appraisal Institute Seminar – *(approved for continuing education of Appraisal Institute Members October 2012)*
 - c. Albert Wilson paper – Wind Farms Residential Property Values and Rubber Rulers – *(Appraiser review of LBNL 2009 report)*
 - d. Albert Wilson, Professional Profile
 - e. Clarkson University study – Values in the wind
 - f. Effects of Wind Energy – Hoen – 8-1-13
 - g. Ben Hoen Biography
 - h. Hoen LBNL 2009 report
 - i. Hoen 2010 interview by Clif Schneider.
 - j. Falmouth Real Estate – The Turbine Effect *(Cape Cod Wave article)*
 - k. McCann Consulting Report Green River Wind Project, Lee County Illinois
 - l. McCann Report Addendum *(Green River Project)*

- m. McCann direct testimony Ohio Power Siting Board Champaign Wind LLC
(Includes review of LBNL 2009 and generally applicable opinions regarding large scale wind turbine projects impact on residential values; literature review)
- n. Project location maps, applicant acoustic report, solely for the purpose of ascertaining overall proximity of turbines and the number of “receptor” residences within their study distances.

SUMMARY OF OPINIONS

- 3. Both experts concur that the close proximity and inadequate setbacks NextEra Energy Canada is proposing for its turbines from numerous human habitats will constitute an impairment of the quiet use and enjoyment of the indoor living environment and outdoor living space of a significant number of homeowners and occupants. This impairment can and does take many forms of bona fide nuisance and/or trespass, ranging from visual intrusion of flicker to audible and sub-audible noise impacts, as well as the real estate stigma based on an increasing level of public knowledge and understanding of the relationship between various types of sound and health impacts. Setbacks are not only a land-use compatibility issue; they are inextricably and unavoidably intertwined with the local environment and can be considered a significant environmental impact and an impairment of the habitat for people.
- 4. To the knowledge of both experts, NextEra Energy Canada proposes no effective mitigation measures to reduce or eliminate impacts, which might be accomplished partially through:
 - a) much greater setbacks, of at least 2 miles; and
 - b) shutting down turbines during sleeping hours.
- 5. The market has not made a distinction between manufacture, make, and model or MW ratings of a wide variety of turbines. The market has indicated a broad range of turbine types and size, and the distinction of the market can best be described, from a real estate perspective, as impacts from “large scale”, or “industrial scale” turbines.
- 6. In summary, it is not the manufacturer, or model type that creates the impacts observed; it is the close proximity of noisy, incompatible land use represented by turbines in general that creates the impact to the Human Species Habitat.

PROFESSIONAL BIOGRAPHY - MICHAEL S. MCCANN, CRA

Michael S. McCann has been exclusively engaged in the real estate appraisal profession since 1980, and is the owner of McCann Appraisal, LLC.

EXPERIENCE

His appraisal experience has included market value appraisals in 20 states of virtually all types of commercial, office, residential, retail, industrial and vacant property, along with a wide variety of unique or special purpose real estate, such as limestone quarries, hotels, contaminated properties, etc. Appraisals have been prepared for purposes including condemnation, litigation, purchase, sale, estate planning, fractional interest valuation, leasehold and leased fee analysis, financing, divorce, damages and construction defects, easements, highway extension and widening, foreclosure, and numerous other purposes.

He has gained extensive experience in real estate zoning evaluations and property value impact studies, including analysis of gas-fired electric generating plants, shopping centers, industrial facilities, limestone quarries, sanitary landfills, transfer station, cell tower and wind farm projects. He has been retained as an independent consultant to municipalities, government agencies, corporations, attorneys, developers lending institutions and individual and private owners associations, and has completed appraisals for the States Attorney of Cook County, Illinois, for numerous downtown office buildings, major retail, hotel and commercial properties.

In addition to evaluation of eminent domain real estate acquisitions for both property owners & governmental condemning authorities, Mr. McCann has served as a Condemnation Commissioner (2000-2002) appointed by the United States District Court - Northern District, for the purpose of determining just compensation to property owners, under a federal condemnation matter for a natural gas pipeline project in Will County, Illinois.

He has been a speaker at seminars for the Appraisal Institute, the Illinois State Bar Association and Lorman Education Services on topics including the vacation of public right of ways (1986), and Property Taxation in the New Millennium (2000), Zoning and Land Use in Illinois (2005, 2006).

Related real estate expertise has been gained through negotiating transactions with a total in excess of \$65 million for purchase and sales of acreage and smaller sites, commercial and residential properties, both as agent on behalf of private and governmental clients and personally.

EXPERT TESTIMONY

Deposition, trial and public hearing testimony has been given for assignments that include appraisals, studies and consultation regarding real estate located throughout the United States. He has qualified and testified as an expert witness in Federal Court and numerous State Circuit Courts for condemnation, property tax appeal, foreclosure, divorce, and property damage proceedings and zoning matters in the Counties of Cook, Will, DuPage, Boone, Lake, Madison, St. Clair, Iroquois, Fulton, McHenry, Ogle, Marshall, & Kendall, as well as the Chicago and Cook County Zoning Boards of Appeal, the Property Tax Appeal Board (PTAB) and tax court & commissions of Illinois, Wisconsin, and Ohio, Circuit Courts in New Jersey and Indiana, as well as zoning, planning, and land use and County Boards in Texas, Missouri, Idaho, Michigan, New Mexico and various metropolitan Chicago area locales. He has been certified as an expert on the Uniform Standards of Professional Appraisal Practice (USPAP) by the Cook County, Illinois Circuit Court.

PROJECT EXPERIENCE

Mr. McCann has substantial experience in large-scale condemnation and acquisition projects and project coordination at the request of various governmental agencies and departments. These include appraisals for land acquisition projects such as the Chicago White Sox Stadium project, the Southwest Transit (Orange Line) CTA rail extension to Chicago's Midway Airport, the United Center Stadium for the Chicago Bulls and Blackhawks, the minor league baseball league, Silver Cross Field stadium in Joliet, Illinois, I-355 tollway and numerous highway acquisition and improvement projects, railway ROW transactions, as well as many other urban renewal, acquisition and neighborhood revitalization projects.

REAL ESTATE EDUCATION

Specialized appraisal education includes successful completion of Real Estate Appraisal Principles, Appraisal Procedures, Residential Valuation, Capitalization Theory and Techniques Part A, Uniform Standards of Professional Appraisal Practice and USPAP update courses, Case Studies in Real Estate Valuation, Highest and Best Use and Market Analysis, Advanced Income Capitalization, Subdivision Analysis and Special Purpose Properties, Eminent Domain and Condemnation, and Valuation of Detrimental Conditions in Real Estate offered by the Appraisal Institute. In addition, he has completed the Society of Real Estate Experts' Marketability and Market Analysis course, the Executive Enterprises - Environmental Regulation course, and a variety of continuing education real estate classes and seminars offered by other appraisal education providers, such as Litigation Valuation, Appraising in a Changing Economy, etc. Real estate courses from state licensed appraisal education providers were all subsequent to two years of associate study at the College of DuPage for marketing and real estate, and exceed the requirements for the Illinois Certified General Real Estate Appraiser license. Michael McCann is current with all continuing education requirements.

DESIGNATIONS, PROFESSIONAL AFFILIATIONS & LICENSES

Mr. McCann is a State Certified Associate Member of the Appraisal Institute, and the National Association of Review Experts & Mortgage Underwriters designated him as a Certified Review Appraiser (CRA). He was elected in 2003 as a member of Lambda Alpha International, an honorary land economics society, and he served several years as a member of the Appraiser's Council of the Chicago Board of Realtors. He has held appraisal and sales licenses in several states, and is a State Certified General Real Estate Appraiser in the State of Illinois. *(License No. 533.001252, expiration September 30, 2015)*

Michael S. McCann, CRA

Summary of Testimony on Wind Energy Projects

Year	Project Location	Subject Matter
2010	New Hampshire, Groton	NHSEC & deposition. Turbine project impact on neighboring values.
2011	Michigan, Leelanau	Circuit Court & deposition. Turbine impact on neighboring SFR value.
2010	Mass., Wareham	ZBA. Turbine project impact on neighboring values.
2008	Illinois, Bureau	ZBA. Turbine project impact on neighboring values.
2010	Illinois, Adams	County Board. Written testimony re: setbacks and property values.
2008	Illinois, Logan	ZBA. Turbine project impact on neighboring values.
2008	Illinois, Tazewell	ZBA. Turbine project impact on neighboring values.
2009	Illinois, DeKalb	ZBA. Turbine project impact on neighboring values.
2009	Illinois, McLean	Deposition. Turbine project impact on property values.
2007	Illinois, Stephenson	ZBA. Turbine project impact on neighboring values.
2009	Illinois, Livingston	ZBA. Turbine project impact on neighboring values.
2005	Illinois, Ogle	ZBA. Turbine project impact on neighboring values.
2011	Connecticut, Prospect	CSC. Turbine project impact on neighboring values.
2012	Ohio, Champaign County	Ohio Power Siting Board. Turbine project impact on property values.
2012	Illinois, Lee County	ZBA. Turbine project impact on property values; zoning compliance evaluation.
2013	Mass., Dennis	Orleans District Court, Turbine impact on SFR property value.
2013	Illinois, Boone	ZBA. Setbacks and property value impacts.
2013	Indiana, Tipton	BZA. Turbine project impact on property values; zoning compliance evaluation.

Note: Numerous studies, literature reviews, consulting assignments and seminar presentations not included. List is summary of testimony only.

Curriculum Vitae

Ben Lansink, AACI, P.App, MRICS, Real Estate Appraiser and Consultant

Telephone: (519) 645-0750 x 24 Email: ben@lansink.ca

Summary – 2013: Ben Lansink is an experienced professional Real Estate Appraiser and Consultant. He has completed a variety of appraisal and consulting assignments to assist in Mortgage Financing, Power of Sale, Deemed Dispositions, Taxation / Capital Gains Issues involving Canada Revenue Agency (CRA), Expropriation, Insurance Matters such as fire destruction, Family Law, Environmental Issues, Assessment Appeals, First Nation Issues, and Litigation Support.

Lansink Appraisals and Consulting is a division of Wellington Realty Group Incorporated, brokerage, Ben Lansink, broker of record. We are not an active brokerage; we do not list or sell real estate. We maintain MLS® memberships solely to obtain legal access to various real estate board MLS® open market systems.

Accepted as an Expert Witness on many occasions by various Courts and Tribunals.

1974- Fee Appraiser and Consultant

1970-1974 Mortgage Manager, The Royal Trust Company
- Client and real estate mortgage loan approvals

Successfully completed the "Certificate Program" in real estate as presented by The Ontario Real Estate Association.

Licensed under the Ontario Real Estate and Business Brokers Act as a Broker, November 17, 1986, Reg. No. 1914433.

Certified instructor, Courses 1101 and 1102, Appraisal Institute of Canada, until the end of the 1990s.

Course instructor, Introduction to Appraisals, 1995-1996, Indian and Northern Affairs Canada.

Lectured the Assessment Program at Fanshawe College, London.

Certified instructor for the subject "The Principles of Mortgage Financing" for Ontario colleges as administered by The Ontario Real Estate Association, 1975-1985.

Author "UFFI and Market Value" published in the Canadian Appraiser, Volume 29, Book 1, spring 1985;

Author "Conditions of Sale", the Canadian Appraiser, summer 1998.

Author, "Highest and Best Use/Land Use Controls" and "Assessment, Taxation and the Fee Appraiser", Appraisal Institute of Canada, Ontario Association, 1997 and 1998.

Author "Injurious Affection, Lazar v. Hydro One", a case study paper based on a precedent setting case decided by the Ontario Municipal Board in June of 2002. The author presented the case study to appraiser delegates at the Appraisal Institute of Canada's June 2005 Conference, Edmonton, Canada.

Winner, 'Call for Papers', Annual Conference, Appraisal Institute of Canada, Moncton 2011.

Author (1) Case Study Melancthon Wind Turbines Oct-12, (2) Case Study Clear Creek Wind Turbines Oct-12, and (3) Case Study Clear Creek & Melancthon Wind Turbines Oct-12.

Member London and St. Thomas Real Estate Board; Member, Education Committee 1987, 1988, and 1989 (Chairperson 1988); Board Director 1989 and 1990; Member, Ethics Committee 1989; Member, Ethics Appeal Committee 1990.

Member of the Investigating Committee (1989 - 1992) and the Adjudicating Committee (1992 - 1995) of the Appraisal Institute of Canada, Ontario Association. These committees addressed public complaints against members of the Appraisal Institute of Canada, Ontario Association.

Appointed by London City Council to serve as a member at large of the Local Architectural Conservation Advisory Committee (LACAC) 1990-1992.

Appointed by an Order in Council, as recommended by the Attorney General, approved and ordered May 14, 1992 and again on May 14, 1995 by the Lieutenant Governor as a Member of the Assessment Review Board of Ontario, term expired on May 14, 1998.

Member, National Commercial Council, Canadian Real Estate Association, also a Member, Regional Commercial Council, the London and St. Thomas Association of Realtors®.

Ben Lansink has completed the Appraisal Institute of Canada's Ecogift Training Workshop for the valuation of Ecological Gifts as has been established by Environment Canada.

Appraisal assignments have included:

- Airports, Harbours, Cemeteries, Funeral homes
- Hospitals, Institutional buildings - police stations, schools, and churches
- Office towers, Industrial properties
- Apartment buildings, Real property housing a single dwelling
- Retail commercial properties, Hotels/motels
- Mobile home/trailer parks, Marinas, Golf courses
- Farms and farm land, Intensive farms (e.g. pork, dairy, chicken, mushroom)
- Land:
 - Ecologically sensitive, parks and conservation, Aggregate resource
 - Commercial/industrial/residential land
 - Building lots - on water and not on water
 - Landfill sites
 - Indian Reserve Lands
- Rights-of-way, Easements, Market rent studies, Rail corridors, Pipelines
- and many others.

Assignments have been carried out in Ontario, Quebec, Manitoba, Saskatchewan, the Caribbean and New Zealand.

Case Studies pertaining to value diminution resulting in Injurious Affection have been carried out. These included proximity to Airports, Hydro Corridors, Land Fill Sites, Wind Turbines, Roads and Road Works, as well as contaminated land and buildings including urea formaldehyde foam insulation.

Professional Education

- MRICS Member, The Royal Institution of Chartered Surveyors, Member #1293804
Awarded use of this professional designation on November 16, 2009.
- AACI, P.App Accredited Appraiser Canadian Institute, Certificate #2180.
The Appraisal Institute of Canada awarded use of the AACI professional
designation on May 18, 1982.
- CRA Canadian Residential Appraiser, January 1976, Relinquished May 18, 1982.
- FRI Fellow, Real Estate Institute of Canada, 1986, relinquished June 1995.
- CLP Certified Land Planner, Real Estate Institute of Canada, 1990, Relinquished
June 1995.

Membership

Appraisal Institute of Canada
Ontario Real Estate Association, The Canadian Real Estate Association
National Commercial Council of the Canadian Real Estate Association
Ontario Expropriation Association, The London Club, Limited
The Royal Institution of Chartered Surveyors
The Toronto Real Estate Board and the London and St. Thomas Association of
Realtors™ together with access to most Ontario Real Estate Boards.

Appraiser Associates

Ashdown Appraisals & Consulting, Sarnia, Ontario

Clients Served (partial list)

THE GOVERNMENT OF CANADA

Canada Revenue Agency (CRA), Public Works Canada
Indian and Northern Affairs, Environment Canada, Justice Canada

THE PROVINCE OF ONTARIO

Ontario Realty Corporation, Ministry of Natural Resources
The Attorney General, The Ontario Provincial Police

BANKS, TRUST COMPANIES, CREDIT UNIONS, BROKERS, and LENDERS

The Royal Bank of Canada, The Canadian Imperial Bank of Commerce
The Bank of Montreal, The Bank of Nova Scotia
The Toronto Dominion Bank, now TD Canada Trust
The Laurentian Bank of Canada,
The Federal Business Development Bank of Canada
The Hong Kong Bank of Canada, The National Bank of Canada
Korea Exchange Bank of Canada, Investors Group, National Trust
The Royal Trust Company, Peoples Trust Company, Sun Life Trust Company
Libro Financial Group, formerly The St. Willibrord Credit Union
Desjardins Credit Union, Mitchell & District Credit Union
Heartland Community Credit Union Limited
Household Finance, InterBay Funding, LLC, Centract Settlement Services

INSURANCE COMPANIES

London Life, Manulife, Wawanesa Mutual Insurance Company
The Maritime Life Assurance Company, Zurich Insurance

MUNICIPALITIES AND COUNTIES:

Municipalities of Sarnia, Tecumseh, Goderich, LaSalle, Hamilton, Toronto,
Lambton Shores, St. Clair, South Huron, and St. Marys.
Counties of Huron, Lambton, Middlesex, and Oxford.

LAW FIRMS REPRESENTING:

- Corporate, institutional, and individual clients
- Government of Canada Department of Justice
- The Insurer of Members of the Law Society of Upper Canada
- The Insurer of Realtors®, The Insurer of Members of the Appraisal Institute of Canada, The Insurers of Real Property (Damage / Fire Insurance)

OTHERS

Superior Court of Justice, the Honourable Mr. Justice Colin L. Campbell
Conservation Authorities, Nature Conservancy of Canada, General Motors, Ford Motor Company, ArvinMeritor, Inc., Coca-Cola, Owens-Corning, Hollinger Inc., KPMG Inc., Ernst & Young, Real Property Developers, ClubLink Corporation
Private Corporations and Private Individuals (Canadian and International)
The University of Western Ontario, Lambton College, Several School Boards
Bell Canada, The Royal Canadian Mounted Police, EllisDon Construction, Labatt's Breweries
St. Joseph's Hospital, Air Products Canada Ltd., Shell Canada Projects Ltd., and many others.

FIRST NATIONS

Agency 1 First Nation, PWI-DI-GOO-ZING NE-YAA-ZING
Beausoleil First Nation
Cape Croker First Nation
Chippewas of Georgina First Nation
Chippewas of Rama (Mnjikaning) First Nation
Chippewas of the Thames Land Claim Trust
Mohawks of the Bay of Quinte First Nation
NeyashiiNigmiing First Nation
Nicickousemenecaning First Nation
O'BASH'KAAN'DA'GAANG (Indian Reserve 38A)
Saugeen First Nation IR 28 and 29
Walpole Island First Nation, Wapekeka First Nation, Reserve #1 and #2
Sachigo Lake Indian Reserve #1

Indian and Northern Affairs Canada

Assignments have involved both reserve land and non-reserve land that is under effective ownership of a First Nation.

Ben Lansink has lectured the First Nation Land Appraisal Education Program offered by Indian and Northern Affairs Canada.

Litigation Experience – Improvident Sale

Superior Court File 2177/95, Sarnia, Ontario (CIBC v. Wicks et al)

This litigation involved an improvident sale of a real property that was alleged to be contaminated. Portions of Superior Court of Justice Judgment by The Honourable Mr. Justice Steven Rogin released June 18, 2001, follow.

[46] Mr. Lansink aggressively defended his appraisal ...his testimony and his appraisal were carried out in a professional manner.

[49] Where Mr. Lansink's evidence conflicts with that of [another appraiser], I unhesitatingly accept the evidence of Lansink. I therefore assess the value of the property as of July 11, 1994 at \$290,000.

Full details are found in Superior Court File 2177/95, Sarnia, Ontario.

Litigation Experience – Professional Fee Issue

[2000] O.J. No. 5488, Court File No. 22197/96

Ontario Superior Court of Justice, London, Ontario

Killeen J.

Oral judgment: November 3, 2000.

Portions of Superior Court of Justice Judgment by The Honourable Mr. Justice G.P. Killeen on November 3, 2000 follow.

12 This leads me to the hiring of Mr. Lansink, a very experienced senior appraiser, who practices out of London, but who does work in the southwestern Ontario area generally.

29 I am entirely satisfied that all of the hours specified in the log were in fact carried out and reasonably incurred. Mr. Lansink is a very experienced senior appraiser. I was impressed with the care that obviously went into this appraisal from Mr. Lansink's own evidence, and from the report which actually issued from his office.

30 He obviously is an appraiser who cuts no corners and who felt that all of the work that went into this report was absolutely essential in order to carry out this assignment which was, after all, in pursuance of the terms of a Judgment of the Superior Court of this Province.

Full details are found in Superior Court File 22197/96.

Litigation Experience – Real Estate Fraud, Superior Court File 865/01, Sarnia, Ontario

The Honourable Mr. Justice McGarry heard evidence pertaining to four real property appraisals, prepared by four different experts, for the same property.

Portions of the Superior Court of Justice Judgment, read the morning of July 11, 2002, by the Honourable Mr. Justice McGarry follow.

Having reviewed all of the appraisals and the critiques,I am satisfied based on [Mr. Lansink's] report and his evidence that there is an appropriate value of \$3.6 million for the land and his appraisal was accurate in that regard.

Clearly, [the other appraisal] is of little or no use to me, whereas the appraisal of Lansink is of considerable benefit as, notwithstanding the lack of comparisons he had, in my view, he thoroughly canvassed all of the appropriate information sources.

Full details are found in Superior Court File 865/01, Sarnia, Ontario.

The McGarry J. Decision was Appealed: DOCKET: C38809

COURT OF APPEAL FOR ONTARIO HEARD: June 2, 2004

RE: HER MAJESTY THE QUEEN (Respondent) – and –
 GIOVANNI D'ANDREA (Appellant)

BEFORE: LASKIN, CHARRON and LANG JJ.A.

COUNSEL: Brian H. Greenspan, for the appellant
 Shelley Hallett, for the respondent

On appeal from the conviction entered on July 11, 2002 by Justice John F. McGarry of the Superior Court of Justice, sitting without a jury, and from the sentence imposed by McGarry J. on September 23, 2002. Portions of the decision follow:

[3] Any misapprehension of the appraisal evidence is not relevant because Mr. D'Andrea's guilt or innocence did not turn on the value of the property. In any event, the trial judge carefully considered the four expert property appraisals. He gave clear, cogent reasons for accepting, with one adjustment, the Lansink appraisal. The other appraisals suffered from various weaknesses that the trial judge identified, including the use of this very sale as a comparable (when only 50% of the property was sold), the use of other inappropriate comparables, the questionable use of adjustments, and, in one case, a personal attack on the author of the Lansink appraisal, an attack that the trial judge found only served to undermine the other appraiser's credibility.

[4] In the end, after reviewing all appraisals, the trial judge accepted the adjusted Lansink valuation of \$3.7 million as consistent with the \$3.6 million value cited in the shareholder agreement, and the \$1.8 million price offered for 50% of the property. Not only was the trial judge entitled to come to that conclusion on the evidence, but we agree with that conclusion.

Signed: "John Laskin J.A.", "Louise Charron J.A.", "Susan E. Lang J.A."

LITIGATION EXPERIENCE – INJURIOUS AFFECTION AND EXPROPRIATION

Ontario Municipal Board File LC010005, June 11, 2002 – Hydro One v. Lazar, Portions of OMB Decision No. 0781 follow.

... On the whole, the Board finds of the three, the choice of the comparables made by Mr. Lansink to be the more thoughtful, cautious and cogent.

Furthermore, the Board is impressed with the care he took with each of the properties and the very detailed adjustments he had applied to ensure that the direct comparison approach is sensible and not subject to variable vicissitude.

... the Board prefers the approach and analysis chosen by Mr. Lansink both in terms of quantum and methodology and as such, ... we find that the acreage rate of over \$3,000 giving rise to the value of \$270,000 to be valid.

Secondly, the Board needs to determine whether there is in fact an “injurious affection” that might result from the acquisition or the use of the works thereon.

... the Board finds that [the other appraiser’s] hypothesis was refuted by the investigation conducted by Mr. Lansink, who was able to delineate a number of sales that reflect or define such an “incurable factor” pursuant to a very thorough research he had conducted.

Thirdly, there is a finding required as to the extent of the impact. Here, the evidence of Mr. Lansink has not been controverted by Hydro One at all. The evidence is clear that [the injurious affection] would be in the range of 30% to 54%.

Note: Hydro One originally paid the property owner \$4,900. The Section 25 offer was \$20,750 and Hydro One offered \$30,000. Lazar offered to settle for \$40,000, after which Hydro One reduced its offer to \$3,000; hence the OMB Hearing.

Ontario Municipal Board, Issued August 15, 2012, LC110030

1377 Trafalgar Street, City of London Expropriated from McLeod, portion of page 11:

The Board finds the highest and best use to be for two lots fronting on Trafalgar Street. That valuation of fair market value is to be at the \$130,000 valuation of Lansink plus \$35,000.00 for the second lot for a total of \$165,000.00. Both lots will be deeper than most in the surrounding area and the Board finds no diminution from the creation of the second lot on the first. The Lansink appraisal was more fulsome as to the highest and best use.