

FIRST INTERNATIONAL SYMPOSIUM

THE GLOBAL WIND INDUSTRY AND ADVERSE HEALTH EFFECTS: Loss of Social Justice?

SPEAKERS

JOHN HARRISON, PhD

RICHARD R. JAMES, INCE

ORVILLE WALSH, CCSAGE

NINA PIERPONT, MD, PhD (Keynote)

ALEC SALT, PhD

CHRISTOPHER HANNING, MD, MB, BS, MRCS, LRCP, FRCA

ROBERT BRYCE, Author/Journalist

CARL V. PHILLIPS, PhD

MICHAEL A. NISSENBAUM, MD

CARMEN KROGH, BSc Pharmacy

ERIC K. GILLESPIE, LLB

ROSS McKITRICK, PhD

DALE GOLDHAWK, Broadcaster

ROBERT MCMURTRY MD, FRCS(C), FACS

ARLINE BRONZAFT, B.A., M.A., Ph.D.

October 29 to 31, 2010

The Waring House Inn

Picton, Prince Edward County,

Ontario, Canada



**THE SOCIETY FOR
WIND VIGILANCE**

WWW.WINDVIGILANCE.COM

PROGRAM

Welcome

FRIDAY October 29: 12:00 P.M.

- 12:00 P.M. ~ Registration Begins (Waring Hall)
- 5:30 P.M. ~ Welcome Reception
- 7:00 P.M. ~ Introductory Evening Session I



FRIDAY 7:00 - 9:30 P.M.

Session I

No Rules, No Caution, No Accountability

Orville Walsh, CCSAGE NO GLOBAL STANDARDS

Abstract: The rapid expansion of the wind energy industry globally has resulted in governmental authorities at different levels responding to opposing pressures to create or modify regulations and planning guidelines for the siting of utility scale wind turbines. Siting guidelines for health, safety, cultural and natural heritage were reviewed and compared. The results indicate wide ranges of siting standards are being adopted. Government authorities have employed a variety of criteria, resulting in significant variation in the spatial separation between wind turbines and sensitive areas as well as the intensity of the development. Separation distances in many jurisdictions are less than those recommended by health professionals suggesting some in the population are at risk. Current trends in government planning and regulations are discussed.

Bio: Orville Walsh is a resident of Prince Edward County, Ontario and the Chairman of the County Coalition for Safe and Appropriate Green Energy and a board member of the Alliance to Protect Prince Edward County. Walsh held senior management positions with Honda Canada and recently retired after a 30 year career.

John Harrison, Ph.D. IT'S PURE PHYSICS

Abstract: The setback of wind turbines from homes and other sensitive receptors is determined by national and local regulations. These regulations specify a maximum noise level at the receptor and make use of sound propagation models. The models account for spherical spreading of the sound generated by the turbine, refraction of sound by wind speed and temperature gradients, absorption of sound energy by the atmosphere and the ground, and reflection of sound by the ground. In practice, the resulting setbacks result in considerable annoyance, sleep deprivation and consequent health problems for a significant proportion of people living among the turbines. The talk will review deficiencies in the regulations and limitations in the modelling.

Bio: Dr. Harrison has conducted research, taught physics and engineering physics courses and participated on many national and international committees. He has made presentations regarding wind turbine noise to community groups, the International World Wind Energy Conference (2008) and the annual conference of the Canadian Acoustics Association (2009). He is a member of the Ministry of the Environment Stakeholder Focus Group on Wind Turbine Noise.

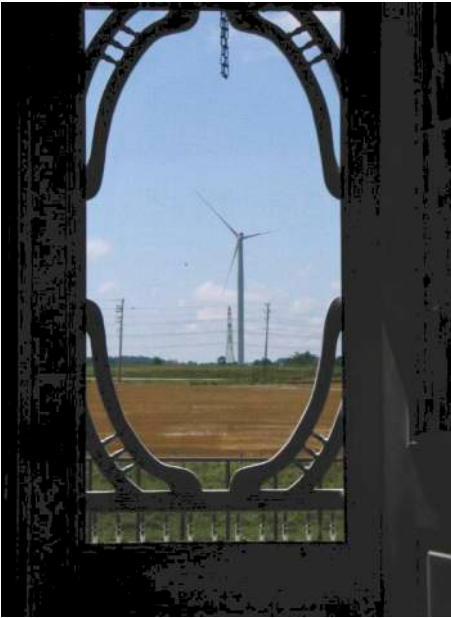
Rick James, INCE HOW WE GOT HERE

Abstract: What was learned in the 1980's was forgotten in the 1990's and set the stage for the Wind Turbine Boom of the 2000's. But the pillars of the position, that wind turbines are safe for use near people's homes, are falling. An overview of the key arguments presented by the wind industry's trade associations and their representatives who support their position will be discussed.

Bio: Richard James has been actively involved in the field of noise control since 1969, participating in and supervising research and engineering projects related to control of occupational and community noise. Since 2006, he has been involved with noise and health issues related to industrial wind turbines. His work includes developing siting criteria for local governments, conducting acoustical tests at wind turbine sites, providing presentations and testimony.



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SATURDAY 8:30 - 10:00 A.M.

Session II

What Clinicians Need to Know

**Robert McMurtry, M.D., F.R.C.S.(C),
F.A.C.S., Chair**

OPENING REMARKS

Bio: Dr. McMurtry is the former Dean of Medicine for the University of Western Ontario, a former member of the Health Council of Canada and member and special advisor to the Royal Commission under Roy Romanow on the future of health care in Canada. McMurtry was a visiting Cameron Chair to Health Canada for providing policy advice to the Minister and Deputy Minister of Health and the Founding and Associate Deputy Minister of Population & Public Health, Canada. He sat on the National Steering Committee on Climate Change and Health Assessment. Presently McMurtry is Professor (Emeritus) of Surgery, University of Western Ontario

KEY NOTE SPEAKER: Nina Pierpont, M.D., Ph.D. DEFINING A SYNDROME

Abstract: Wind Turbine Syndrome. Consider that no government, and certainly no health agency, anywhere on the face of the earth believes in it. Nor does the wind energy industry, which ridicules it as preposterous, telling sufferers they're hysterical and making up their symptoms. Primary care physicians generally look the other way and plead ignorance or indifference. The media, meanwhile, treats it as an entertaining sideshow.

How does one perform credible clinical research in the face of such massive and systematic denial, cover-up, and apathy? Where the research population is often silenced by "confidentiality clauses" or the fear of alienating neighbors and relatives—and potential buyers—should they reveal that their homes are acoustically toxic and, frankly, uninhabitable.

Welcome to the past six years of my life. This morning I'm going to explain how I navigated this surreal landscape, employing the instruments of population biology, clinical medicine, and ethnography—along with the services of a first rate guardian angel.

Bio: Dr. Pierpont is recognized as the first health specialist to identify a pattern of symptoms that manifest themselves when people live too close to industrial wind turbines. She named this Wind Turbine Syndrome. In addition to her clinical research on industrial wind turbines, Pierpont has conducted environmental research. She attended Yale on a National Merit Scholarship and earned a Ph.D in 1985. She attended Johns Hopkins University School of Medicine, and earned her medical degree in 1991 choosing pediatrics as a specialty with emphasis on Behavioural Pediatrics.

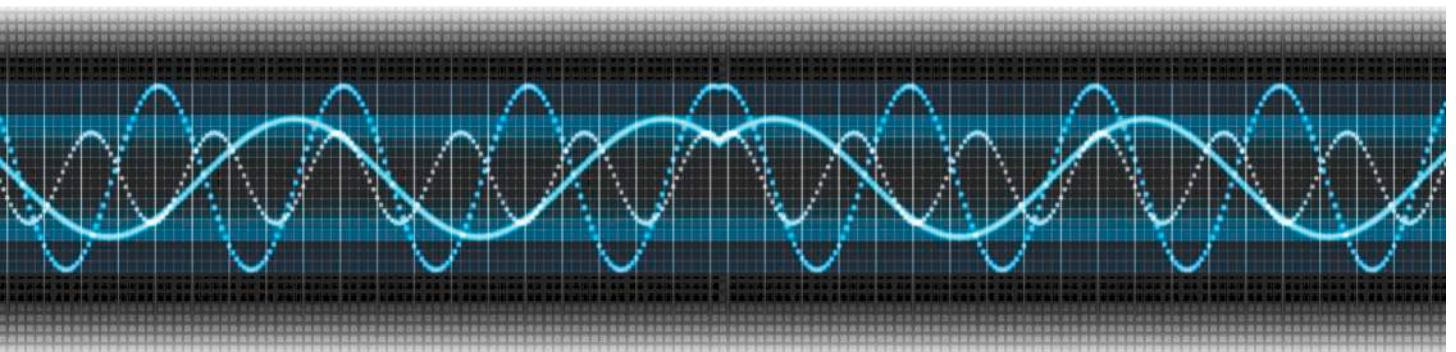
Alec Salt, Ph.D. Cochlear Physiology, M.Sc., B.Sc., Biology INFRA SOUND: YOUR EARS HEAR IT BUT THEY DON'T TELL YOUR BRAIN

Abstract: The ear is far more complex than a microphone. It actively amplifies high frequency sounds, so you hear them better, and likely works to actively cancel out infrasonic sounds, so that you don't hear them. So, it is wrong to regard the ear as insensitive to infrasound. Indeed, measured electrical responses from the ear with infrasound can be larger than those for sounds in the acoustic range and these responses may alter function in a variety of ways. They may also be transmitted to the brain by subconscious pathways that do not represent "hearing", but affect some people in other ways, such as by causing the sensation of "fullness" or perhaps disturbing sleep. It is therefore physiologically possible that prolonged exposure to the moderate levels of infrasound generated by wind turbines could have detrimental effects on people, mediated by unheard physiological changes in the ear.

This work supported by NIDCD/NIH, grant number DC01368, 2005-2010.

Bio: Dr. Salt is a researcher with the Department of Otolaryngology at Washington University in St Louis. He gained a Ph.D. in cochlear physiology at the University of Birmingham, UK in 1977 and performed post doctoral studies at the University of Southampton, UK and the National Institute of Environmental Health Sciences, USA before taking an academic position at Washington University in 1984. He is currently a Professor of Otolaryngology. His research has been funded by NIH for over 20 years and has focused on how inner ear function depends on the fluids of the ear that bathe the sensory cells.

Coffee Break 15 minutes



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SATURDAY 10:30 - 12:00 noon

Session III

Cause and Effect

Arline Bronzaft, B.A., M.A., Ph.D.

CHILDREN: CANARIES IN THE COAL MINE

Abstract: Research linking loud sound to hearing loss in youngsters is now widespread, resulting in the issuance of warnings to protect children's hearing. However, studies attesting to the adverse effects of intrusive sounds and noise on children's overall health and psychological well-being have not received similar attention. This, despite the fact, that many studies have demonstrated that intrusive noises, e.g., from passing traffic or overhead aircraft, adversely affect children's cardiovascular system, memory, language development and learning acquisition. While some American schools have received funds to abate noises from intrusive aircraft, many schools still expose children to the noises from passing traffic and overhead aircraft. Additionally, homes and schools expose youngsters to the impacts of interior noises as well. Discussion will center on the harmful effects of noise on children, what has been done to remedy the problem, and what needs to be done further to lessen the impacts of noise, including low-level vibrations.

Bio: Dr. Bronzaft is Professor Emerita of the City University of New York and serves on the Mayor's GrowNYC.org as chair of its noise committee. She has given testimony on the hazards of noise to government and health organizations, serves as an expert witness in court cases, and advises U.S. public officials, both locally and nationally, on the dangers of noise. She has written extensively on noise impacts, including chapters in nine books, articles in academic journals and writings in the popular press. Her latest chapter: *Noise: Not Just Hazardous to your Ears - Harmful to Physical and Mental Well Being* appears in *The Consumer Handbook of Hearing Loss and Noise*. She frequently lectures on noise in the United States and abroad and has been quoted in the media internationally. She also advises anti-noise organizations in the United States, Canada and the United Kingdom. She received a Certificate of Appreciation from Region 2 of the U.S. Environmental Protection Agency for her achievements in the protection of the Environment

Dr. Christopher Hanning, B.Sc., MB, BS, MRCS, LRCP, FRCA, MD

THE TORMENT OF SLEEP DISTURBANCE

Abstract: The most common complaint of those exposed to industrial wind turbine noise (WTN) is sleep disturbance. Many of the other symptoms, fatigue, headache, nausea, memory problems and tiredness are probably secondary to sleep disturbance. Sleep is by the brain and for the brain. It's principal purpose seems to be the consolidation of memory. Loss of sleep, in the short term, causes daytime sleepiness, fatigue, problems with memory and thought processes and, in the longer term an increased risk of obesity, diabetes, high blood pressure and heart disease. There is now a large body of evidence proving beyond any reasonable doubt that sleep is disturbed and health impaired by wind turbines at distances up to 2km, at noise levels claimed to be safe by the industry.

Bio: Dr. Hanning is Honorary Consultant in Sleep Disorders Medicine to the University Hospitals of Leicester NHS Trust, UK. He retired in September 2007 as Consultant in Sleep Disorders Medicine. After initial training in anaesthesia, he developed an interest in Sleep Medicine. He founded and ran the Leicester Sleep Disorders Service, one of the longest standing and largest services in the UK. He was a founder member and President of the British Sleep Society His expertise in this field has been accepted by the civil, criminal and family courts. He chairs the Advisory panel of the SOMNIA study, a major project investigating sleep quality in the elderly, and sits on Advisory panels for several companies with interests in sleep medicine.



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SATURDAY 12:30 - 1:30 p.m.

Session Working Luncheon

Robert Bryce

A JOURNEY OF DISCOVERY

Abstract: Over the past decade, the global wind sector has experienced phenomenal growth thanks largely to the industry's ability to portray itself as "green." But that growth will be difficult to sustain for several reasons: the industry has overstated its ability to deliver meaningful savings with regard to carbon dioxide emissions; it faces a growing backlash from landowners irritated by noise and flicker caused by the turbines as well as from ratepayers who are learning the high costs of "green" energy; and finally, the industry must compete, particularly in the US and Canada, with low natural gas prices for the foreseeable future.

Bio: *Robert Bryce is an American author and journalist, living in Austin, Texas. His articles on energy, politics, and other topics have appeared in numerous publications, including the New York Times, Washington Post, Wall Street Journal, Counterpunch, and Atlantic Monthly. In April, Bryce published his fourth book Power Hungry: The Myths of Green Energy and the Real Fuels of the Future, which discusses many of the problems associated with renewable energy in general and wind energy in particular. In researching the book, Bryce discovered numerous reports of adverse health effects from industrial wind turbines across the U.S. as well as in Canada, Europe, Australia, and New Zealand. Bryce spent 12 years writing for The Austin Chronicle. In 2006, he began working as the managing editor of the online magazine, Energy Tribune. Bryce is now a Senior Fellow at the Manhattan Institute. In March 2009, he testified before the Senate Committee on Energy and Natural Resources to discuss the limits inherent in renewable energy, saying "no matter how you do the calculations, renewable energy by itself, can not, will not, be able to replace hydrocarbons over the next two to three decades, and that's a conservative estimate."*

SATURDAY 2:00 - 3:30 p.m.

Session IV

Research and Motion

Michael A. Nissenbaum, MD DELETERIOUS HEALTH EFFECTS ARE UNDENIABLE

Abstract: In the Real World: Adverse Health Effects Related to Industrial Wind Turbines – Controlled Studies at Mars Hill and Vinalhaven, Maine.

Following reports of adverse health complaints among residents of Mars Hill, Maine, a pilot study was undertaken to provide information to the Public Health Subcommittee of the Maine Medical Association in the first half of 2009. This represented the world's first controlled study of adverse health effects related to industrial wind turbines. Adverse effects are real, and significant. The findings from this pilot study will be discussed. Since the pilot study was completed, a larger, more detailed and standardized controlled study has been undertaken at Mars Hill and Vinalhaven, Maine, utilizing validated questionnaires. Preliminary findings from these will be presented.

Bio: *Dr. Nissenbaum received his undergraduate education at McGill University in Montreal and completed medical school at the University of Toronto. He specialized in diagnostic imaging and completed his residency at McGill University. He received a Fellowship from the University of California. Currently, Dr. Nissenbaum is certified by the Royal College of Physicians of Canada, and American Board of Radiology. He is a radiologist at the Northern Maine Medical Center, Fort Kent, Maine. Previous positions include Junior Faculty at Harvard University and Associate Director of MRI at a major Harvard teaching hospital.*

Carl V. Phillips, Ph.D.

THE ABSENCE OF HEALTH STUDIES PROVES NOTHING

Abstract: The claim that there is no evidence of negative health effects from wind turbines near residences is clearly false since there are ample credible reports of people experiencing problems. Many of these offer compelling case-crossover data, with individuals experiencing changes in symptoms when changing the exposure. But to the extent that we do not have as much data as would be ideal – which is certainly the situation – the problem is the failure to carry out the optimal studies. Obviously the lack of evidence resulting from the lack of studies is not informative. We should demand affirmative evidence about what risk exists, and make decisions that admit and consider whatever is found. Industry should pay for independent research but failing that, creative solutions are called for. I hope to develop a self-administered research tool for collecting case-crossover data that could be used by any interested community.

Bio: *Dr. Phillips is an expert in epidemiology and related health sciences, as well as scientific epistemology and methodology. He has earned a PhD in public policy (with an emphasis on economics-based decision making) from Harvard University, completing a dissertation on environmental policy and economics. He completed the Robert Wood Johnson Foundation Scholars in Health Policy Research postdoctoral fellowship at the University of Michigan followed by a second fellowship in philosophy of science at the University of Minnesota. While Phillips has worked in consulting, primarily analyzing energy and environmental policy issues, most of his career has been as a professor of public health. He currently directs an independent academic-style research institute. He has taught at the schools of public health at the Universities of Minnesota, Texas, and Alberta (Canada), as well as the evidence based medicine programs at the University medical schools of Texas, Alberta and Harvard's Kennedy School of Government.*

Coffee Break 15 minutes

SATURDAY 4:00 - 5:30 p.m.

Session V

The Consequences - Violation of Social Justice

Carmen Krogh, B. Sc. Pharmacy
A GROSS INJUSTICE

Abstract: "I trusted the wind energy companies" - "I can't believe the government is doing this to me"

Those experiencing symptoms feel victimized by the very systems that would normally protect them. The lack of social justice hurts deeply. Many families are affected by the industrial wind turbines sited too close to their homes. In some cases Ontario families have abandoned their homes to protect their health. Some have had to sign non-disclosure agreements as a condition of a buy out of their homes by the wind developer. Their grief is exacerbated by the emotional toll, disturbed living conditions, loss of enjoyment of their homes and property, and financial loss and the negative impact to the health of their families.

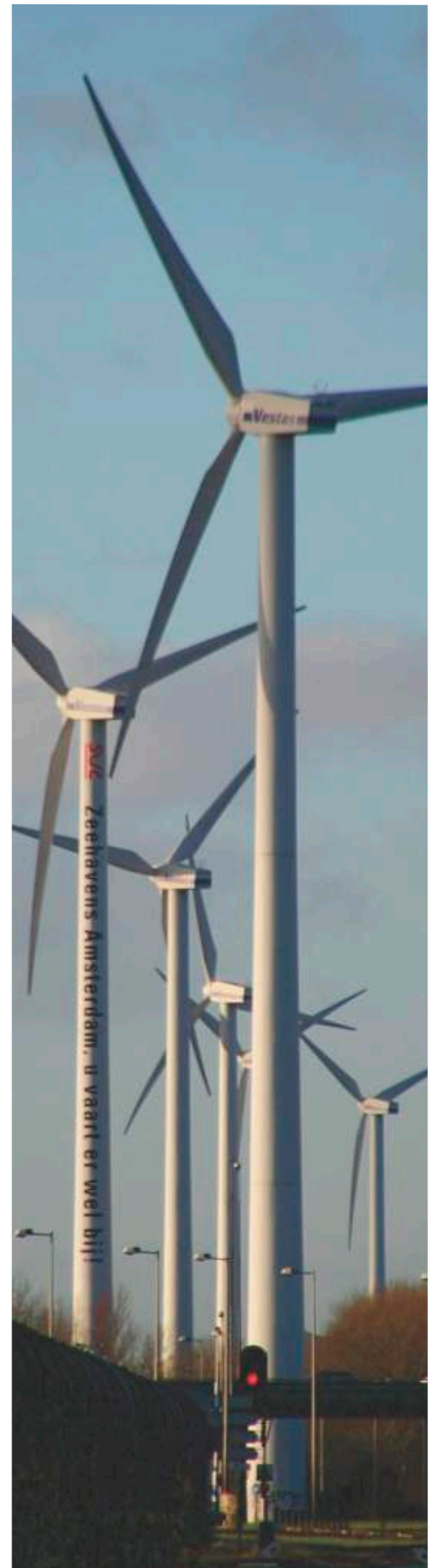
Bio: Carmen Krogh is a retired pharmacist with more than 40 years of experience in health. She has made a number of presentations throughout Ontario and other jurisdictions about the adverse health effects associated with wind turbines. Krogh and Gillis are conducting the WindVOiCe © (Wind Vigilance for Ontario Communities) self reporting health survey. She formed the support network VOW© (the Victims of Wind) whose members are suffering adverse health effects associated with industrial wind turbines. She is in touch with many victims in Ontario and other jurisdictions. Krogh has held senior executive positions at a major teaching hospital, a professional association and Health Canada (Pest Management Regulatory Agency). She was a former Director of Publications and Editor-in-chief of the Compendium of pharmaceuticals and Specialties (CPS), the book used in Canada for prescribing information on prescription medication. Doctors, pharmacists, nurses, and other health care professionals use this publication in their daily practice.

Eric K. Gillespie, LLB
SOCIAL JUSTICE AND THE LAW

Abstract: The advent of large-scale industrial wind turbine (IWT) projects has brought with it many legal challenges but also opportunities. Families, communities and municipalities are more aware of the risks posed by IWTs. At the same time, legal options are starting to be pursued that may lead to local resolutions of issues, or potentially provincial, national or even international changes. These legal strategies include (i) private litigation brought by individuals, (ii) public interest litigation raising broader issues; (iii) by-laws, resolutions and other steps taken by local government, and (d) administrative hearings outside of the court system. All of these areas will be reviewed, using Ontario as a case study but with examples of how communities around the world are also responding.

Bio: Eric Gillespie practices civil litigation and administrative law with an emphasis on environmental issues. He graduated with Distinction from the University of Western Ontario Law School in 1994. He articulated in part with the Canadian Environmental Law Association. Since then he has appeared before all levels of Ontario Courts and a wide variety of administrative tribunals including the Ontario Environmental Review Tribunal, the Ontario Municipal Board and at the Walkerton Water Inquiry. He has also assisted clients in other parts of Canada including New Brunswick, Quebec, Nova Scotia and Newfoundland. Gillespie is a lead litigator in a class action lawsuit that resulted in an award of \$36 million being announced in July, 2010, the largest environmental class action award in Canada to date. In October, 2009, on behalf of his client Ian Hanna, his firm filed a court application for judicial review of the Green Energy Act, 2009 based on the Precautionary Principle as it applies to industrial wind turbine installations. He also currently represents residents and community groups from across Ontario on wind related issues.

Dinner 7:30



SUNDAY 8:30 - 10:00 am

Session VI

Social Marketing – Disinformation

Dale Goldhawk, Broadcaster MEDIA AND PRE-EMPTIVE STEREOTYPING

Abstract: I believe that advocacy journalism, used sensibly and carefully, backed up by proven facts and presented with passionate conviction, can influence and even change public policy. I am in my 43rd year as a journalist and have seen it happen countless times. And it happens at any stage in a war against policy, dumb laws and stubborn champions of bad ideas. Advocacy journalism was a major triggering factory that stopped a dump site project, even after the hole had been dug, getting ready for the garbage that never came. And this was a project where we were told it was a “done deal” and that nothing could be done to stop it. There are no done deals with projects that are counter to the best interests of people—and that includes wind turbines. Advocacy journalists would do well to remember the prescriptive words of Mohandas Gandhi: “First they ignore you, then they laugh at you, then they fight you, then you win.”

Bio: Dale Goldhawk is a veteran journalist in Canadian newspapers, radio and television. He is also the host of Goldhawk Fights Back on The New AM740, Zoomer Radio. Throughout his

career Mr. Goldhawk has been an advocate for people who have been disadvantaged in some way and whose voices have not been heard. In 2005, he won a Canadian Cable Television Association Galaxy Award for Best Performance. Earlier in his career, Goldhawk worked for the Toronto Telegram, Global Television, CBC Television, CBC Radio and the CTV Television Network. He is host of Goldhawk Live, daily, on Rogers TV across Ontario, and Goldhawk Live on CPAC, out of Ottawa, seen across Canada on Sundays. Goldhawk was nominated by the Canadian Association of Journalists as one of Canada's outstanding investigative journalists in 2001. He was a Gemini Award nominee for Best Reporter in 1996, and a National Radio Award nominee for Best Broadcaster, Phone-In Radio, in 1992.

Ross McKittrick, Ph.D.

COAL KILLS: WHERE ARE THE BODIES?

Abstract: This presentation will look at the evidence regarding the health effects of coal-fired power generation in Ontario. The Ontario government maintains that the risk is large enough to necessitate shutting down the two major coal-fired generating stations in Southern Ontario and replacing them with, among other things, wind turbine installations. I will explain the nature of the Lambton and Nanticoke generating facilities and the network of thermal power plants in the northeast corridor of which they are a part. I will also explain their air pollution control features and the potential effects on Southern Ontario

air quality from eliminating these plants, as estimated in the province's own cost-benefit analysis. I will then discuss observed air pollution trends in Ontario since the 1960s and show that the claims that current air pollution levels result in thousands of cases of illness and death are not supported in up-to-date, peer-reviewed literature.

Bio: Dr. McKittrick is a Canadian economist specializing in environmental economics and policy analysis. He is professor of economics at the University of Guelph; a senior fellow of the Fraser Institute, a Canadian free market public policy think tank. He is the author of Economic Analysis of Environmental Policy (2010) McKittrick gained his doctorate in economics in 1996 from the University of British Columbia, and in the same year was appointed Assistant Professor in the Department of Economics at the University of Guelph. In 2001 he received an Associate Professorship and has been a full Professor since December 2008. He has since published research on palaeoclimate reconstruction, including co-authoring "Corrections to the Mann et al (1998) Proxy Data Base and Northern Hemisphere Average Temperature Series" and "Hockey Sticks, Principal Components and Spurious Significance" with Stephen McIntyre. He continues to publish research in economics, usually in the area of environmental policy.

Coffee Break 15 minutes

SUNDAY 10:15 - 11:15 am

Session VII

Toward A Global Movement

Dale Goldhawk MODERATOR FOR NEXT STEPS

Dr. Robert McMurtry
Wrap Up & Proceedings



PAPERS SUBMITTED

Robert Thorne, Ph.D.

"The Problems with 'Noise Numbers' For Wind Farm Noise Assessment October 2010

"Assessing Noise from Wind Farms"
[Slide Show] October 2010

VAD Team

Dr. Mariana Alves-Pereira or
Dr. Nuno Castelo-Branco

Pending

Special Recognition and Thanks

The Waring House

Nora Rogers, Henriette LaBelle-Campbell and all the Waring House staff whose commitment and support more than fulfilled our expectations.

Volunteers

Lorrie Gillis, Barbara Ashbee and all others who have assisted with their time and expertise.

County Coalition for Safe and Appropriate Green Energy

Symposium Materials

James Virgín and Claudette Herrington of Empress Communications, for their commitment and tireless, expert dedication on the design, art work, printing and support for the Symposium program, posters and other materials.
info@empresscommunications.com

Organizing Committee

Beth Harrington, Carmen Krogh, Robert McMurtry, Orville Walsh, past co-chair.



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