

**“HEALTH IMPACT IN TWO LOCAL
WIND PROJECTS”**

A PRESENTATION TO
KINCARDINE COUNCIL

WEDNESDAY MARCH 16, 5PM

KINCARDINE MUNICIPAL BUILDING

PRESENTED BY CATHARINE CRAWFORD
FOR
CENTRAL BRUCE-GREY WIND CONCERNS
AND
HARM (Health Affected Resident Meetings)

Mayor, Council Members and Local Citizens:

Thank you for the opportunity to present to you today.

I am speaking to you today, as a long term member and e-mail co-ordinator for Central Bruce-Grey Wind Concerns. I am here to communicate with you about what people living near local wind factories are experiencing in their health since the commissioning of these projects.

The wind projects related to this presentation are both in the municipality of Kincardine and are owned by Enbridge Ontario Wind Power. The Underwood Project comprises 110 turbines, and the project south of Tiverton, known as the Cruikshanks Project, has 5 turbines. Both projects came on line in 2008.

The information I am sharing with you is coming from individuals who have volunteered health information to our group, Central Bruce-Grey Wind Concerns, between 2009 and the present. As a citizens' advocacy group, we have kept complaint data from residents and have assisted residents with support, research, and information about making their complaints known. This has included distributing to residents the *Dispute Resolution Process*, written by Enbridge and mandated in an OMB adjudication (2007). Enbridge did not distribute this *Dispute Resolution Process* to project residents, as it was instructed to do in the adjudication; however, our advocacy group undertook to deliver it to each household, so residents would be aware of it and use it to make any necessary complaints to Enbridge and the Ministry of the Environment (MOE – Owen Sound District Office).

A copy of this *Enbridge Dispute Resolution Process (EDRP)*, which has been on record at this Municipality since 2007, is attached to your package for your reference. There are also by-laws associated with the OMB decision (2007) which relate specifically to the Appellants to the OMB. At a future date, our group would like to bring another delegation to Council on the subject of these documents and about their implementation.

In the fall of 2010, due to the communication of health complaints from the community to us, Central Bruce-Grey Wind Concerns began to facilitate Health Affected Resident Meetings (HARM), offering information and resources to those in the Cruikshanks and Underwood Projects. Patti Hutton and I co-facilitate this group. Our goal is to help people feel less isolated and to understand their right to complain. We have never advertised, but through word of mouth have a list of 20 or more families who are suffering the health effects of living in a wind project. The numbers of affected individuals known to us increases weekly, though not all residents choose to attend meetings.

Resident's names have been changed for this presentation, as these residents do not wish to come forward at this time. Permission has been sought in order to share their health impact experience. It is important to note that sharing personal health information about the effects of wind turbines upon oneself and one's family is not easy for anyone to do publically, particularly when your government, the wind company, your doctor, the media and your neighbours tell you there is no evidence for what you are experiencing--- that it can't be true that wind turbines hurt people. We hope more residents will be able to speak out in their own voice; however we understand why people are hesitant to do so.

This presentation features the health distress of 10 households in the above-named wind factories. In all cases discussed forthwith, the setback distances range from 450-1500 m.

Resident Family #1

Debbie and Russell have a farm in Kincardine Township, and there is a cluster of five turbines located north and north-west of their home.

Debbie writes about their situation: "The closest turbine to our residence is 1 km away. When the first wind projects were being proposed in the community, the MOE and proponents stated that a 350m setback would

be adequate to protect neighbouring homes from adverse effects. Therefore, we were not expecting any problems from noise or shadow flicker.

“When the turbines began operating, we discovered that they were not ‘whisper quiet’. The sound varied from a jet-over-the-house sound, to a gentle whoosh, to a deep beating sound and on some days, to no sound at all. We could not hear them in the house with the doors and windows closed.

“ I began to notice pressure in my ears after being outside for any extended period of time, and found myself going inside quite a bit, or wearing earplugs, for relief.

“After the first winter, we began to notice headaches, which have increased in frequency. In the last 6 months, I have noticed a high-pitched ringing tone in my ears. We find the symptoms are more severe in winter than in the summer.

“This winter, we have been coping with the health impacts by leaving our farm to spend time in town or neighbouring communities. We have purchased a trailer and rented a site at a nearby campground in order to get away from the wind turbines on a regular basis during the warmer weather. However, this can only be considered a temporary solution.”

Debbie continues: “I have spoken with other residents who are experiencing similar problems, but they are not willing to discuss them publicly. I have also spoken with people who have wind turbines on their property and are suffering ill effects, but they cannot come forward due to provisions in their lease agreements.

“The government simply cannot keep ramming these industrial installations into rural areas until they address the existing problems. The 350m setback and the new 550m setback are based on computer noise modeling. However, computer models do not trump real world observations and everywhere that large industrial wind turbines have been built, similar health problems have been reported”.

Resident Family # 2

Donna lives with her husband in the Enbridge Project. She reports that since the turbines came on line it takes her 2-3 hours to get to sleep, and the sound of the turbines “comes through her pillow”. Whether the winds are calm or high, her sleep is disrupted 50 % of the time. Donna describes the noise as a “roaring freight train” going through her home. She also has a tightness in her chest and heart racing, which comes on when she is at home, and not when she is at work. She has developed high blood pressure. She is tired at work due to not sleeping well and reports that her home is no longer a place where she can relax. Her spouse has sleep disruption as well, and notes that it is noisier in different parts of their home, including where they sleep. Both Donna and her husband have noted since the turbines started that there are electrical problems in their home (electrical pollution due to the transmission lines and substations required for the project). Three times they have touched metal door knobs and been thrown backward and landed on the floor due to an electrical charge. They have witnessed bolts of electricity when turning on light switches. This never happened before.

When asked why they have not complained as yet to Enbridge and to the MOE, Donna replies that she fears nothing will be done, and that complaining would be very difficult emotionally. She is very angered by these changes in her health, and reports none of these adverse health effects were present prior to the turbines.

Donna reports that when something is mechanically wrong with the turbines near her home, just like a light switch, the trucks seem to be dispatched to the area to stop the clanking and clunking. She wishes if only the wind company could demonstrate as much concern about the humans living near them as it is concerned about the quick resolution of the mechanical malfunctioning of the turbines themselves.

Resident Family # 3

Kim and Mark report that the noise level in their two-story home is very high and that sleeping is a problem. They also report that their home “vibrates”. Kim has developed headaches, dizziness and light-headedness, and is going for her second MRI related to these symptoms. Their quiet country property, complete with night-time sounds of crickets, distant coyotes, and the chirping of many birds is now completely changed by

indoor and outdoor noise, sleep deprivation, flicker, and disturbing health symptoms which did not exist before.

Resident Family # 4

In this household, Jim is much more affected than his spouse, Ida. Jim developed sleeping problems right away. When he wondered out loud to his physician about the possible link to turbines, the doctor replied to Jim, "That is nonsense. Take these pills for sleep and anxiety". His sleeping problems were temporarily solved, but after a month or two, the pills no longer worked. Jim often sits up all night and cannot sleep. He has taken several dizzy spells at home and is prone to falling, feels dizzy when driving his car, and has experienced a seizure. He has headaches, heart palpitations, and blood pressure problems. Ida reports he has become forgetful and disorganized. When Jim goes away on vacation, he sleeps like he did before the turbines. When he returns home, his health problems resume.

Jim complained to Enbridge, and sound testing was completed at his home over several weeks by the same company which did the initial sound assessment for Enbridge in 2007 (Valcoustics). Both sound measurements taken in 2009 and 2010 proved that Enbridge was out of compliance with MOE (Ministry of the Environment) regulations¹, but nothing as yet has been done.

Resident Family # 5

Jessie reports that since the Cruikshanks turbines started up she is tired all the time, and never feels rested and relaxed. Her husband Dave, who never before had headaches, now has them frequently. Their teenage son and daughter are constantly tired and have headaches which go away when they leave home for periods of time. Jessie says that certain parts of their home are very noisy, and that she cannot enjoy her property, including gardening and other recreational pursuits on her land. Her rights to health, well-being, and pleasure in her property have been taken away.

Resident Family # 6

This 3 person dairy farming family noticed health impact one month after the project started in Fall 2008. Each member of the family developed headaches and ear aches. Their physician said wind turbines could not be the problem. For nearly 2 ½ years they have been living with noise in the home, which disturbs their sleep. When Jack, the father in this home goes away on farming business he feels better. When he gets within the wind project boundaries on his way home, he begins to feel unwell again.

Jack reports that his dairy cattle began to have decreased milk production after the turbines began. The cows were hesitant to drink from their troughs and were agitated and kicking more in the milking parlour. The cats disappeared from the parlour too. Dairy production was down 20%, and so was their income.

Since involving the resources of an expert in electrical pollution, and the installation of mitigating devices, the cattle are no longer hesitant to drink from their troughs, the cats are back, and milk production is up to normal. These devices of course do not mitigate noise and sound problems related to the turbines. These farmers report that with the loud sound of the turbines on the land, they can no longer hear the sounds of nature which used to give time-tested cues as to when to plant crops. The farmland has become industrialized. It has been changed, and important ecological cues erased.

Jack's wife Denise reports that she felt her body began to "vibrate" with the onset of the turbines. She has developed ringing in the ears, loss of concentration, and heart palpitations. Two to three times a night she has to get out of bed due to sleep disruption, and she is restless during the day. Some mornings she wakes up having had a good sleep and notices that the turbines were not running. Switching to grounded telephones in the house has assisted with electrical pollution, and Denise reports that her heart palpitations have decreased. However, she still has tinnitus, a sense of vibration in her body, lack of sleep, and poor concentration.

Their son who assists with the family farm began to get "sharp, spiking headaches" when the project started, and also suffers from tinnitus, nausea, and exhaustion. When he goes to town, the symptoms of nausea and tinnitus go away.

¹ Results of this report and a review of the findings can be made available if requested.

Resident Family # 7

Rilla and Jake noticed a change in their health within one month of the turbines spinning. They had a noise increase in and outside of their home. Jake has headaches, especially when the turbine noise is louder in the home. He has taken to spending more time in the cellar, rather than the main floor, as his headaches ease up when he goes underground. Rilla has had headaches since the start of the project, which go away when she leaves for work. She has also developed nausea and lowered appetite and is “up half the night tossing, turning, and walking around due to noise”.

Jake recalls a mechanical failure of a turbine near his property 3-4 months into them coming on line. There was a very loud explosion, and smoke began to pour out of the engine. Several parts fell away off the engine, but the blades remained on. Jake reports that the cranes and trucks arrived nearly instantaneously out of nowhere to fix the turbine, replace parts, and get it running again. To his knowledge, it was never reported to the public. While this is not a health related incident, it does demonstrate how quickly the wind company can take action when it chooses to.

Resident Family # 8

Within a day of the start of the turbines, Kirk noticed the noise in his home. He has to have the television volume up much higher than average to mask the sound of the “whoosh, whoosh, whoosh”. He has developed ringing in his ears and chest tension. When outside in certain parameters of his property he gets an unusual vibration across his chest. His spouse Anne, who was a vibrant, healthy person who fell asleep easily, now cannot sleep. She is sleep-deprived continually, and has encountered “hassles” at work due to her fatigue and stress. She has also developed tinnitus.

When asked why they have not yet complained to Enbridge or the MOE, Kirk replies that he believes it would “go nowhere with Enbridge... Enbridge is out for profit”. When it comes to the MOE, Kirk reports a lack of trust for a government body that has handed out the regulations for wind projects. What good will it do, he asks.

Resident Family # 9

Mary in the Cruikshanks Project reports that “the continuous rumbling sound of the turbines disturbs my days and particularly my nights”. She suffers from insomnia, headaches and ringing and pain in her ears. She likens the noise in her home to the “continuous sound of a generator”, which was not there prior to the erection of the turbines. When the MOE came to her home and discovered the turbines were 1- 1.5 km from her home she was told the turbines “were too far away from her and there was nothing they could do”. She has requested that the MOE come to do noise testing and to date no one has come.

Resident Family # 10

Louise began to notice her sleep deprivation some months after the turbines started. She also developed headaches, unusual sensations in her ears, pressure in her head, restlessness at night, unexplained nausea, motion – sensitivity, and an overall feeling that “something was not right” with her health. Louise, a typically highly organized and effective person noticed a change in her cognitive functioning: Over time, she could no longer prioritize her day or multi-task. She could barely carry on. She quit her job, a very significant part of her life that much more than a mere job.

She became nauseated around the turbines and dizzy intermittently. Louise began to develop tinnitus, like a high-pitched tone in her ears, intermittently. She lost body weight due to vomiting from migraine and nausea. Her headaches became constant and she began receiving treatment at headache and pain clinics.

Dr Nina Pierpont, Scientist, Physician and Author in Malone, NY has diagnosed her, by an in-person examination, with Wind Turbine Syndrome. Louise’s Specialists and GP have told her she must leave her home. When she retreats away to the cottage she can eat, she can sleep, and the pressure is relieved from her ears.

Louise has lost her career and the safety of her home. She cannot live there and she cannot work. The disruption of the wind factory on her life is of massive proportions. Her health, well-being and livelihood have been harmed beyond the scope of your and my imagination.

When Louise reported to Enbridge that she had made health complaint reports to the MOE, and asked the Enbridge Operations Manager what he was going to do about it, he replied, "Absolutely nothing. We have been given a license by the government and we are going to continue".

Summary Remarks:

- As a citizen's advocacy group, we know not everyone is affected in the same way by wind projects. Some people live near them with less or no effects. But clearly, significant numbers of people living a range of distances from turbines in these 2 projects are very disturbed by them. ²
- We are aware that what we are presenting is qualitative and anecdotal in nature. We are in favour of a 3rd party, neutral, scientific study to ascertain what, if any distance, is safe for all human and livestock receptors. The need for a scientific study does not negate the validity of these resident health experiences³. They are real, and they are not being adequately addressed. A moratorium on any further industrial wind development until a study determines health and safety risks is absolutely necessary.
- People are struggling every day. They are struggling with a force in their lives they did not choose, nor were they given the opportunity to choose. The lack of transparency on behalf of the Proponent in the planning stages ensured that people could not know the full impact and potential of the project. The Proponent continues to do very little to assure residents their concerns are serious and real.
- Our group has heard the message over and over: "These projects divide communities". People who used to relate, work together, and be neighbourly are no longer behaving as a rural community should. Farmers and rural dwellers will become more isolated as lines continue to be drawn in the sand.
- Complaining to the wind company, one's municipal government, the MOE district office⁴ and keeping records of your own health and phone calls pertaining to your health are daunting tasks to most people, let alone for people who are sick. We will never stop inviting residents to complain, but asking people to complain to 3 or more institutions and bodies of government with no guarantee of being believed, about something which has made them sick and which is very personal, is asking a lot from the innocent public.

Therefore, we ask you as officers of our municipal government to make Kincardine a "Complaint-Friendly" municipality for those experiencing health impact from wind turbines. It is happening on our doorstep; it is not an abstract concept bantered about in politically glamorous articles about renewable energy. It is actually ruining people's lives --- here--- and we need a municipal government which does not doubt its citizens, and who will go to bat for them.

We ask that as officers of municipal government that you bear in mind these experiences of health impact when you engage in negotiations with wind companies and as you develop policies and by-laws pertaining to Wind Energy Systems. May these *Stories of HARM* figure prominently as a wakeup call for what can happen when the greed for green goes wrong.

² The Society for Wind Vigilance, an international federation of professionals promoting the development of protective health guidelines where industrial wind turbines are concerned have collected Health Surveys from Ontario residents for more than a year. For 700 turbines in Ontario, over 100 surveys have been returned by individuals identifying health impact. In addition, dozens more contact calls were made to a Wind Vigilance help line by individuals who did not fill out a survey.

³ At the International Symposium on the Wind Industry and Adverse Health Effects (October 2010), Dr. Carl Phillips stated "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."

⁴ It has been our observation that the Owen Sound District office of the Ministry of the Environment has begun to regard citizen complaints with increased concern. Some MOE staff have expressed sincere efforts to assist residents, within the confines of their mandate and current equipment.

Thank you for listening to this presentation, and for continuing to work on this critical municipal, community and health issue.

Your questions are welcome, and I or one of my colleagues can address them.