



## association to protect AMHERST ISLAND

### APAI NEWSLETTER – January 2011

#### SYNOPSIS

Since the last Newsletter, the Ontario Power Authority has released a priority list of wind and solar energy projects to join the Ontario electricity grid, draft government regulations for off-shore and on-shore turbines have been released, there have been developments in two legal cases, and an International Symposium on the Adverse Health Effects of Wind Turbines was held in Picton.

#### NEW ADDRESS

The new address is: APAI, PO Box 4, 5695 Front Road, Stella, ON K0H2S0.

#### WINDLECTRIC AND THE PRIORITY LIST FOR GRID CONNECTION

In April 2010, an island circular informed us that Windlectric had submitted a completed application to the Ontario Power Authority (OPA) for a wind energy project on Amherst Island. In December 2010 the OPA released its ranked list for connecting renewable energy projects to the grid. The projects on the list had been submitted to OPA between October and December 2009 but had not been approved for connection in the 2010 announcement of winning proposals. **The Windlectric project was not among the 242 on the list.** It could be that the Windlectric project was rejected or it could be that Windlectric had not completed its application until after December 2009. The OPA has given no indication of how it will prioritize projects submitted after December 2009. The waiting list amounts to a nominal 6000 MW of generating capacity (30 times the size of the Wolfe Island project!). No off-shore wind energy projects were included. They will be treated separately. So far the only off-shore project to receive a contract is the Wolfe Island Shoals development.

#### GOVERNMENT REGULATION

**Off-Shore Setbacks:** Recently two sets of draft regulations were released by the Ontario government with a period for public consultation. The first was issued by the Ministry of the Environment and concerned the proposed 5 km exclusion zone (setback) between shore and turbines for off-shore projects. A response was submitted to the Ministry which argued that sound propagates readily across water and that the setback should vary from 5 km for a 5-turbine system to over 20 km for a 100 plus turbine system such as that approved for the Wolfe Island Shoals. The response, based upon European research, can be read at: <http://windconcernsontario.wordpress.com/offshore/>

**Birds:** The second draft report was issued by the Ministry of Natural Resources (MNR) and concerned the siting of on-shore wind turbines on Crown and private land to mitigate adverse effects on birds and bird habitats. Essentially the report outlines the many hoops that the developer must jump through in preparing a complete application but the bottom line is that the allowable kill rate is 18 bird kills per turbine-year, including 1 raptor per 5 turbine-years. The draft makes no mention of prohibiting turbines on major migratory pathways such as the eastern end of Lake Ontario or much of Lake Erie. A response was submitted to MNR, based upon letters and reports by US and Canadian wildlife organizations.

## **LEGAL CHALLENGES**

**Ian Hanna v. Ontario (31/12/2010):** “Albeit short and to the point, I hope this update will provide as much encouragement and optimism as possible as we approach the end of 2010. There may be little to report from this point forward, until the final hearing in January 2011 – as much of the legal interaction is now complete.

Cross-examinations of the expert witnesses have been completed. The lawyers are now working to prepare their arguments for the main hearing which is scheduled to take place on January 24<sup>th</sup> and 25<sup>th</sup>, 2011. A three judge panel will hear the arguments from both sides and then render a decision, accordingly. This hearing will be open to the public.” Ian Hanna, Big Island – Prince Edward County. (ed. note: Ian’s update has been shortened somewhat.)

Donations are still solicited and can be sent to: Ian Hanna Fund, c/o APPEC, Box 173, Milford, Ontario, K0K 2P0. Make Cheque to: APPEC Legal Fund

**Kent-Breeze Wind Farm:** A second major challenge has been set in motion by the Chatham-Kent Wind Action group and area resident Katie Erickson. The Ontario Environmental Review Tribunal will hear an appeal of the approval of the Kent-Breeze Wind Farm, the first development approved under the Green Energy Act. The development consists of 8 turbines near Thamesville, mid-way between London and Windsor.

Eric Gillespie will be acting for the appellants. The Ministry of the Environment will be defending their approval. Witnesses for both sides of the February hearing will be coming from the US and UK as well as from across Canada. The basis for the appeal is that there will likely be serious harm to human health if the project proceeds.

**Eric Gillespie:** At the Picton Symposium, Eric Gillespie, the environmental lawyer representing Ian Hanna and Katie Erickson, discussed the legal avenues open to those under threat of having turbines put up in proximity to their homes. He covered private litigation, public litigation and proponent litigation. Private litigation would follow, say, a renewable energy approval for a new development.

There is a very short time frame for this and therefore preliminary work would need to be in place. The Ian Hanna legal challenge is an example of the more general public litigation. This is a challenge to the noise regulations associated with the Green Energy Act and especially the seemingly arbitrary 550 metre minimum setback. The challenge is based upon the precautionary principle that nothing shall be done that could cause harm. Unlike private litigation, the onus is on the proponent and Ministry of the Environment to demonstrate that the regulations were designed in such a way that no harm would result. Proponent litigation refers to challenges to local government conditions for the issuance of building permits; an example would be the requirement for certification from Health Canada that there will be no adverse health impacts.

### **THE GLOBAL WIND INDUSTRY AND ADVERSE HEALTH EFFECTS:**

This international symposium was organized by the Society for Wind Vigilance ([www.windvigilance.com](http://www.windvigilance.com)) and was held over the weekend of 29<sup>th</sup>/31<sup>st</sup> October 2010 in Picton. The meeting brought together 15 speakers from Canada, the USA and England, together with an audience of about 100. Notably, there were no representatives from the Ontario government! Highlights of the meeting were as follows:

Rick James, a noise control engineer, likened the present adverse health effects from turbine noise to the problem of 1980's sick buildings. This earlier problem was eventually ascribed to inaudible modulated low-frequency noise from the ventilation systems.

Nina Pierpont, a New York State pediatrician, has published a book describing wind turbine syndrome, a set of diagnosed adverse health effects common to many of those subject to living in proximity to wind turbines. Some of the problems of affected adults were described, including chest sensation, panic attacks, breathing problems, waking in a state of alarm.

Alec Salt, a hearing specialist at Washington University in St. Louis, described his research. The inner ear has separate pathways to the brain for the familiar audible sound and inaudible infrasound (very low frequency sound). He described animal studies that demonstrate that the second pathway responds to infrasound levels that are far below those at which the audible pathway responds. This is especially important research which puts the lie to the claim by the wind industry that because the low frequency sound emitted by turbines is below the hearing threshold it cannot possibly cause adverse health effects.

Chris Hanning is a respected sleep specialist from Leicester in England. He reviewed the normal cycle of sleep modes during a night's sleep. People have different sensitivities to noise. Nevertheless, for all sensitivities, the probability of undisturbed sleep decreases as the noise increases. Chris discussed the character of turbine noise and its propensity to disturb sleep: there is the

swishing, thumping, pulsing; it is “in your face” noise; it is not masked by background noise.

Michael Nissenbaum described his clinical study of health impacts caused by the Mars Hill wind energy facility in Maine. The facility has 28 120-metre tall turbines on a ridge. There were 38 adults within the target area, a distance of 600 metres from the turbines, and 41 adults in the control area beyond the target area. The final results showed a clear dependence of both sleep quality and mental health upon the distance of the homes from the turbines. Again, this is very important work; it is the first clinical study of the adverse health effects of turbine noise.

Ross McKittrick, an economics professor at the University of Guelph gave a devastating critique of the Ontario government’s analysis of the coal pollution impacts on health in Ontario. He demonstrated that in Ontario particulate matter, sulphur dioxide and nitrous oxide level have all been dropping consistently since the 1970s and are now at or below recommended levels. He took issue with the economic argument for closing the coal plants and introducing renewable energy on a large scale as compared to retrofitting the coal plants with modern pollution controls. As an aside, please see the following link to an op-ed piece that Ross had published in the Stratford Beacon Herald; it is entertaining and hard-hitting: <http://www.stratfordbeaconherald.com/ArticleDisplay.aspx?e=2907400&auth=ROSS%20MCKITRICK>