Dear Sir, Madam:

Re: Algonquin Power Corporation’s proposed Industrial Wind Turbine Installation on Amherst Island

I am writing this letter to raise my strongest possible objection to Algonquin Power’s proposed installation of 33 to 37 Industrial Wind Turbines on Amherst Island.

I support the aim of ensuring that our energy future includes affordable, reliable energy resources that minimize their negative impact on the environment, generate energy via methods that are not harmful to human or animal health and do not require government subsidies in order to prosper.

The Amherst Island Wind Project does not meet any of these criteria. Below I provide limited information as to the shortfalls.

**Environmental Impact / Amherst Island**

Amherst Island is an Important Bird Area (IBA) of Global and Continental significance. The Amherst Island IBA, which encompasses the entire island, is recognized as being a site of Global and Continental Significance for Congregatory species. Specifically, the migrating Brant, which make their way to the island in enormous flocks each Spring. A diversity of habitats has resulted in Amherst Island becoming a renowned site for a wide variety of other birds including shorebirds (such as Spring-migrating Dunlin), raptors (particularly significant are the island’s wintering concentrations of hawks and owls), and land-birds (such as large concentrations of migrating swallows).

Amherst Island, located on a known north-south migratory flyway in Lake Ontario, is seasonally impaired by fog and other weather events. Migratory birds and those that inhabit the island often experience low visibility conditions that may increase the potential number of turbine blade/bird collisions. Furthermore, weather conditions may impair visibility (fog, storms, snow) during migration.

Amherst Island is a small island that supports the foraging needs of a large owl population. Owls rely upon a foraging range well beyond their nesting area. Owl Woods, a birding Mecca of international renown, is threatened by an array of 4 turbines which march the width of the island, establishing an impossibly narrow gauntlet through which the birds must fly in order to access the foraging fields scattered throughout the remainder of the island.

*Islands of Life: A Biodiversity and Conservation Atlas of the Great Lakes Islands*, a report prepared in 2010 for the Ontario Ministry of Natural Resources, the Natural Heritage Information Centre, the Nature Conservancy of Canada, and The Nature Conservancy, ranks Amherst Island 2nd in biodiversity significance.

Lake Ontario Northeast Coast is comprised of 911 islands, among all these islands, Amherst Island scores second in biodiversity significance. With the destruction of a great deal of the biological diversity found on Wolfe Island, resulting from the installation of 86 industrial wind turbines and their ancillary roads and structures, it is possible that Amherst Island would now rate the top scoring island for biodiversity significance in Lake Ontario’s Northeast Coast.

**Cumulative Environmental Impact:**

The situation on Amherst does not exist in isolation and cannot be considered in isolation. The cumulative effect of the turbines proposed by various corporations for the eastern end of Lake Ontario, must be understood in terms of density. The approximate 400 proposed and installed land-based turbines would be sited along approximately 50 km of shore line between Point Petrie in Prince Edward County and Wolfe Island, with an additional 268 proposed in the water.

The potential effect that this array of turbines will have on the bird population has already been determined. The 86 turbines on Wolfe Island are responsible for the highest bird / turbine kill ratio in Canada, and are second only to Altamont Pass in the US for highest bird / turbine kill ratio in North America.

The cumulative effect of an additional 450 turbines in such a biologically significant area can only serve to echo and magnify the Wolfe Island disaster. This begs the question; where will the birds fly?

**Health**

Ontario’s present zoning standards are based on statistical modeling, using information available prior to 2009. The growing body of published peer reviewed evidence regarding the adverse health risks of placing wind turbines too close to homes has not been considered. This body of evidence includes the 2011 Environmental Review Tribunal which found that “The case has successfully shown that the debate should not be simplified to one about whether wind turbines can cause harm to humans. The evidence presented to the Tribunal demonstrates that they can, if facilities are placed too close to residents. The debate has now evolved to one of degree.”

Multiple studies and case reports are being published that systematically record a group of symptoms that seems to occur in approximately 10% of individuals who live within 2 to 10 Km of wind turbines. These symptoms included but are not limited to:

* Sleep disturbances
* Chronic headaches /migraines
* Ringing in the ears
* Visceral vibratory vestibular disturbance
* Decreased abilities in memory and concentration
* Fatigue
* Iritability
* Anxiety

The mounting data points to the following as being responsible for the detrimental health effects of the wind turbines.

* Audible noise
* Low frequency noise
* Shadow flicker
* Mixed sensory input (confusing and unrelenting sensations that conflict in the brain).

Low frequency noise (C-weighted measurements) is not always audible although the body feels the vibration that stimulates the hearing and balance parts of the inner ear. This type of noise may also resonate in body cavities leading to chest pressure and a sense of motion. To those individuals susceptible, the results can include nausea, vomiting and motion sickness. In point of fact low frequency noise is so unpleasant, it has been used in the Middle East as a weapon for crowd control. The Ontario guidelines do not take into account C-weighted measurements despite the fact that most wind turbine noise is low frequency.

A great deal of the most recent literature, peer reviewed journal articles etc. can be reviewed by following this link.

The map released by

**Economic Concerns**

Following are highlights from the Ontario Auditor General Report of 2011 which clearly indicate that the Green Energy Act, as it stands, is not economically feasible.

* In April 2010, the Ontario Energy Board completed an analysis predicting that a typical household’s annual electricity bill will increase by about $570, or 47% by 2014. More than half of this increase due to renewable energy contracts.

* The Ontario government’s estimate of the creation of 50,000 jobs in the “green energy” sector is not founded in fact. The report further noted that even if 50,000 new jobs were created, the higher energy costs will result in job losses elsewhere in the economy. Another recent study in Canada estimated that each new job to be created as a result of renewable energy programs would cost $179,000 each year.”
* Studies have shown that for each job created through renewable energy programs, about two to four jobs are often lost in other sectors of the economy because of higher electricity prices.

* Ontario is presently experiencing an oversupply of electricity. An analysis of net exports from 2005 to the end of 2011 indicates that in that time Ontario lost $1.8 billion through electricity exports. It is interesting to note that the first industrial wind turbines came on line in 2006, introducing a new level of volatility to the grid.

* Despite anticipated surpluses, renewable energy generators who have contracts with the OPA will get paid even though Ontario does not need their electricity. These payments could range from $150 million to $225 million a year.

* In 2010, 86% of wind power was produced on days when Ontario was already in a net export position.
* The IESO confirmed that consumers have to pay twice for intermittent renewable energy—once for the cost of constructing renewable energy generators and again for the cost of constructing backup generation facilities, which usually have to keep running at all times to be able to quickly ramp up in cases of sudden declines in produced during times of surplus. The cost will be well over 225 million per year, and will be more likely 10 times higher each year.

If the justification for spending billions of taxpayer dollars on “green energy” is the reduction of CO2 **e**missions, expanding Ontario’s renewables portfolio is redundant. According to the IESO, in 2011, 79.1% of Ontario’s electricity came from nuclear and hydro power, which do not generate emissions.

For the reasons outlined above, I support the APAI position as stated below:

1. Based upon the most recent scientific evidence, APAI is calling for an immediate cessation of the development of all on-shore industrial wind turbine installations within 8 km of a Great Lakes shoreline and within areas such as Important Bird Areas, major migratory corridors, wilderness areas, national parks, wildlife refuges, and other sensitive habitat as wetlands and riparian corridors.
2. APAI supports the over 75 municipalities that have put forward resolutions against the development of Industrial Wind Turbine installations.  We also support the Ontario Federation of Agriculture, the Ontario PC Caucus, and many other groups in calling for a moratorium until the province conducts a comprehensive, health based, analysis of the 40 decibel / 550 metre setbacks.

We need to make sure we are doing what is best for our health and the environment.  I look forward to hearing back from you within the next 10 business days.

Best Regards,