Dec. 12<sup>th</sup>, 2014

Board Secretary, Ontario Energy Board, 2300, Yonge Street, 27<sup>th</sup> Floor, Toronto ON M4P 1E4

Reference: EB 2014-0300

Dear Ms. Walli,

I would like to add my voice to those requesting an oral hearing on the Windlectric application to construct a transmission line from the sub-station on Amherst Island to a grid connection on the mainland. There are many problems with the project and these problems need to be aired in an open oral hearing.

## **Substation Connection**

Only in this application has it been revealed that the substation will be connected to the island underwater cable vault by means of an overhead transmission line using steel poles up to 80 feet in height. This is double the height of the island hydro poles and quite out of character with the ambience of the island. Overwhelmingly it is the wish of the island community that all transmission lines be buried. It is also the wish of the municipality as expressed in the municipal consultative form submitted to the (then) Ministry of the Environment.

The Windlectric application notes that on the mainland it is the wish of the land-owner that the transmission line be buried; this was agreed to by Windlectric. As stakeholders in this project we would like to hear from Windlectric, in an open forum, why what is sauce for the goose is not sauce for the gander! An oral hearing is required.

## The Interests of the Consumer

The Windlectric wind energy proposal has never made sense, neither for the consumer, for the investors in Algonquin Power and Utilities Corporation nor for the Province of Ontario.

<u>Consumer</u>: For the consumer, the price is 135/MWh with a built-in inflationary addendum. This is expensive in relation to the cost of electricity from natural gas, hydroelectricity or nuclear fuel. Wind energy is intermittent, non-dispatchable and stands at the front of the line. Hydroelectricity and nuclear generation cannot always be ramped up and down to cope with the intermittency of wind energy and so natural gas turbines must be kept spinning, adding to the cost of electricity and diminishing the impact of wind energy on CO<sub>2</sub> generation. To make matters even worse, new policy from the Ministry of Energy is to pay wind energy developers not to produce when there is a surplus of energy generation.

By approving this application for a transmission line permit, the OEB would be aiding and abetting the inflation of electricity pricing to consumers.

<u>Investors:</u> I maintain that Algonquin Power, the corporation behind the shell company Windlectric, has misled its investors and the Ontario Power Authority in its prediction for the potential wind resource for a 75 MW wind energy development on Amherst Island. In its announcement of the project in February 2011 Algonquin Power (APCo) announced an energy output of 247 GWh/annum. As is easily demonstrated, this is equivalent to a capacity factor of 38%. Using hourly IESO wind generation data for all listed wind projects in Ontario I have calculated the annual capacity factor for the projects dating back to 2006. A summary is shown below:

	Power							
July to June	(MW)	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
Amaranth 1	67.5	30	29					
Amaranth 1 & 2	200				24	28	27	27
Dillon	78						36	36
Gosfield	50						33	33
Kingsbridge	40	33	35	33	28	32	30	31
Port Alma 1	101				34	35	34	34
Port Alma 2	101						36	36
Port Burwell	99	29	27	28	25	28	28	28
Prince	189		29	27	24	29	28	27
Ripley	76			33	26	33	32	31
Talbot	99						33	33
Underwood	182				26	32	31	31
Wolfe Island	198				24	30	29	29

 Table 2: Annual Average Capacity Factor (Efficiency) Given as a Percentage.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> See: Appendix A of <u>http://www.protectamherstisland.ca/wp-content/uploads/2013/08/Report-to-Renewable-Energy-Analysts-September-2013.pdf</u>

Going forward from June 2013 would be meaningless with the policy of paying not to produce.

There has never been a capacity factor of 38%, not even with the modern turbines sited along the high wind resource north shore of Lake Erie. Amherst Island lies in the lee of Prince Edward County and has significantly less wind then neighbouring Wolfe Island which is un-protected from the prevailing winds off Lake Ontario<sup>2</sup>. APCo has made no effort to justify its proposed high capacity factor.

In its latest APCo quarterly report<sup>3</sup> and in a follow-up report from the TD Bank analyst Sean Steuart<sup>4</sup>, APCo makes clear that the Windlectric project is high cost in comparison to other wind energy projects. This is summarized in the following Table:

1	0 1	1 5		
Wind Project	Timing	Total Cost (\$mm)	Power (MW)	\$mm/MW
Morse (Sask.)	Q1/15	81	25	3.3
St. Damase (QC)	Q4/14	49	24	2.0
Val Eo (QC)	Q4/15	52	24	2.2
Odell (MN)	Q4/15	347 (US)	200	1.7
Amherst Island	H2/16	260	75	3.5
Chaplin (Sask.)	Q4/16	340	177	1.9

Relative expense of Algonquin's wind projects:

\$mm is \$million; Power (MW) is nameplate power. Note that Morse and Chaplin are in the high wind northern extension of the Great Plains.

The Amherst Island project at \$3.5mm/MW is significantly higher in cost than the weighted average \$1.8mm/MW for the other projects on its books.

Building on an island is an expensive proposition, as was discovered by TransAlta with the cost over-runs for the Wolfe Island project. Already the capex for the Windlectric project has increased from \$230mm to \$260mm. Before the recent increase our best estimate for the IRR for the project was -4.5%.<sup>5</sup>

<u>Province:</u> Once investors realize that this project is a money loser there is a good chance that there will be pressure on APCo to walk away. The question then arises of who decommissions the project. Although APCo has assured the local municipality that it will pay for the decommissioning and almost certainly if MOECC approves the project there will be a condition that Windlectric is responsible for decommissioning, there is no guarantee in the form of a letter

 $<sup>^2</sup>$  Despite its unjustified significantly over-optimistic annual energy prediction APCo does appreciate that the wind resource is mediocre and is compensating by proposing to use large blade diameter turbines. We estimate that with these modern turbines the capacity factor will be about 26%.

http://investors.algonquinpower.com/Cache/1001192128.PDF?Y=&O=PDF&D=&fid=1001192128&T=&iid=4142

<sup>&</sup>lt;sup>4</sup> For the full report on Algonquin Power see pages 2 to 6 of:

http://www.investorvillage.com/uploads/51871/files/tdw26.pdf

<sup>&</sup>lt;sup>5</sup> This estimate takes into account the average 1%/annum decline in capacity factor for the system of Ontario wind energy generating projects. This decline has since been reported on-shore and off-shore in other jurisdictions.<sup>1</sup>

of credit or similar from APCo, the parent company of Windlectric. Our best estimate for the decommissioning cost is \$70mm<sup>6</sup>. This is far beyond the means of the lessors or the municipality. If APCo does not cover the cost of decommissioning, the cost will have to be borne by the Province of Ontario. Inevitably, this cost will be passed on to the electricity consumer or the Ontario tax-payer. It would be negligent if OEB permits a connection without an iron-clad guarantee of decommissioning costs.

Again, there are serious questions here that need to be addressed in an open forum at an oral hearing.

## **Policies of the Ontario Government**

The Ontario Government has changed its thinking since the 2009 Green Energy and Economy Act and the FIT 1 regime. The 50,000 jobs never materialized, the FIT 1 tariffs were far too generous, local input was deemed irrelevant and companies flocked to the money like pigs to the trough. FIT 2 lowered the tariffs and attempted to get support from the municipalities. The result was a raft of euphemistically-called vibrancy funds offered to municipalities and over 80 municipalities declaring themselves to be unwilling hosts. Under the new RFP proposed system there is a real opportunity for local participation and competitive pricing.

However, the Windlectric proposal is a legacy from almost 4 years ago and out of line with current government thinking. To many of us it seems that APCo's heart was never in this project, that it has dithered over the REA assessments and has ignored the concerns of the community and the municipality. For instance, the proposal to use the village street as a route for one third of the construction traffic, including turbine components, shows disregard for the convenience and safety of the village community, including its children. Remember that the blades are 56 metres long, as far as I know the largest in Ontario. I have heard it said that Algonquin Power is approaching the approval process as if no-one lived on the island and that children and the school did not exist.

Again, I request an oral hearing to review this project in the light of new thinking within the Ontario Government.

## Timelines

There are discrepancies between the application for a transmission connection permit and other information that is publically available. This is additional support for our contention that APCo is not paying full attention to the approval process.

In paragraph 11 of Exhibit B, Tab 1, Schedule 1: "Windlectric is in the late stages of negotiating a road use agreement with Loyalist Township in respect of the road crossing on Amherst Island." At Council on Monday past, a Councillor asked directly of the Director of Infrastructure Services and of the Director of Planning and Development Services: Is there or has there been any

<sup>&</sup>lt;sup>6</sup> See reference 1 for the justification.

progress on a road use agreement since the public meeting held on Amherst Island on January 29<sup>th</sup>, 2013. The answer in both cases was no!

In paragraph 15 of Exhibit B, Tab 1, Schedule 1: "Construction is expected to take 8-12 months to complete. The proposed Transmission Facilities would then be commissioned and would be ready for service by approximately Spring 2016." This contrasts with "The project has a planned construction time frame of 12 to 18 months with most of the construction expected to occur in 2016" from page 19 the 2014 Q3 Financial Results Report dated November 13<sup>th</sup>, 2014<sup>3</sup>. The TD Report puts completion at 2016, H2<sup>4</sup>.

To demonstrate the lack of reality that attends this project the same paragraph on page 19 of reference 4 reads: "The Amherst Island Wind Project is located on Amherst Island near the village of Stella, approximately 15 kilometres southwest of Kingston, Ontario". Directing anyone to Amherst Island would use: Amherst Island is near the village of Millhaven, approximately 25 km south-west of Kingston. Stella is the village <u>on</u> Amherst Island, a 20 minute ferry ride from Millhaven.

The Ontario Energy Board needs an oral hearing to determine just where this project stands, whether it is premature to even consider approving a permit at this time and to ascertain a consistent timeline.

Yours sincerely,

John Harrison