

**WLGWAG***West Lincoln Glanbrook Wind Action Group*

January 19, 2012

Mayor and Members of Council, City of Hamilton

Re: Motion to Revise Wind Turbine Moratorium and
City of Kingston Resolution on Wind Turbine Consortium

Dear Mayor Bratina and Council Members:

Before jumping on the offshore wind jobs bandwagon I trust any responsible citizen or politician would seriously look at the total equation of jobs and economic consequences resultant from similar green job initiatives which have been undertaken multiple times before around the globe with more often than not disastrous results.

Green Jobs Critique

The announcement of 1900 local jobs sounds good but are these real sustainable jobs for the long term or are they actually just highly subsidized, make work jobs in the larger global wealth transfer scheme.

The very existence of the Windstream Energy project must first be recognized as totally dependent upon hefty premiums paid by the electrical consumer as dictated under the Green Energy Act. Global studies agree that no industrial wind project would ever exist without massive government mandated subsidies. Unfortunately while the Provincial government proudly predicts some 50,000 jobs under the Green Energy Act, the Province really doesn't have a clue as shown in the recent Ontario Auditor General's report :

"No comprehensive business case evaluation was done to objectively evaluate the impacts of the billion dollar commitment. Such an evaluation would typically include assessing the

perspective economic and environmental effects of such a massive investment of in renewable energy on future electrical prices, direct and indirect job creation or losses”.

Further the Auditor General noted that only 40,000 of the jobs would be related to renewable energy of which 75% were expected to be construction jobs lasting only from one to three years which similarly maybe all that any Hamilton worker could expect

The true benefits of subsidized renewable energy projects are typically hard to decipher as the wind industry and their well funded lobbyists are actually instructed to “confuse” the real facts as witnessed by the leaked “Renewable Energy Matters –Campaign Outline”, by the liberal PR group Sussex. This document detailed an **intentional campaign of deception** by the pro-wind vested interest groups and companies. To advance their own interests the report blatantly recommends:

“It will be critical to confuse the issue in the political/ public/ media away from just price to include key value attributes such as jobs, clean air, farm incomes etc. Renewables can not be defined by price alone.”

Apparently as witnessed by the Windstream Energy and the Loon Consortium press conference on Wednesday January 18th, they appear to be following the Sussex campaign’s plan in it’s recommended strategic core messaging, tactical and logistical considerations. Strategically the recommended core message is to be framed around the jobs and investments; tactically they recommend coalition building/out reach to social and earned the media; and logistically it stresses the importance of timing, such as what we saw with Wednesday’s press coverage in advance of the City Council meeting. (see Sussex Campaign Outline at:)

http://www.wlwag.com/uploads/5/2/9/6/5296281/sussex_group.pdf

However for the sake of the larger community let’s not be “confused” by such high priced PR and “green washing” and let’s seriously look at the numbers. The Hamilton Spectator article boldly highlighted the 19,000 jobs and the 1.5 billion wind project while in smaller print it reports “no dollar figures for the value of the local contracts are being released”. As for the 1900 jobs, that figure comes from a four page study (including the 1 page summary and 1 page appendix) as prepared by AECOM Consulting who coincidentally is also a member of the Canadian Wind Energy Association (CanWEA) whose principal goal is to promote wind energy. Hardly an independent, objective study.

Mr. Parker gallant, retired banker, Financial Post Comment Writer, and Director of Energy Probe And Wind Concerns Ontario has reviewed the study and together with further analysis [see attached] has come up with the following conclusions:

www.wlwag.com
wlwindactiongroup@gmail.com

- 1900 temporary construction jobs will pay on average an annual salary of only \$46,842, not exactly a well paid job
- 175 permanent operating/ maintenance jobs will pay an average salary of \$51,428
- Net cost per job created as paid through increased electrical charges will be \$280,000
- Windstream Energy will be paid 19¢/kWh versus current 2011 Ontario market cost of only 3.15 ¢/kWh resulting in a 15.85¢ kWh premium. Based on a 29% operating efficiency Windstream Energy stands to receive a guaranteed subsidy above market costs of \$124,000,000 annually paid for by all Ontario electrical consumers
- In summary Mr. Gallant states we don't need jobs that will cost the ratepayers of Ontario these excessive monies and which will drive further jobs from the Province.

So what do these numbers really mean in relation to the benefits of the jobs created? To understand this we must look to the larger economic impacts as amply documented for various other costly green energy projects. The respected C. D. Howe Institute released a study last year titled "Zapped; The High Cost Of Ontario's Renewable Electricity Subsidies" in which they state:

- Annual additional cost of electricity from existing and proposed Feed In Tariff projects over new gas generating plants will cost an additional \$1.5 billion a year for an annual extra \$310.00 cost per household.
- More standby generation capacity will have to be built or purchases made from outside the Province for when the intermittent wind/solar is not producing
- Higher energy costs will raise business costs resulting in fewer jobs than would otherwise have been created and net jobs created may therefore be negative.

Recent testimony to the U.S. Congress on green jobs by R. J. Michaels Ph.D. Economics professor and consultant stated:

- "The lower the cost of energy to the economy, all else being equal, the higher the job creation and economic growth. Raising energy costs by forcing the use of uneconomic technologies to create jobs will have exactly the opposite effect. Put simply, higher energy costs reduces the production of non energy goods and services"
- "Any analysis of job creation by green energy must consider the simultaneous effect of job destruction. Policies and raise the cost of energy to households and businesses must leave them with fewer funds to spend elsewhere. Jobs that cost more to create will generally have higher costs in terms of jobs lost elsewhere".

Mr. Michaels went on to criticize the number of green jobs predicted using standard economic models or formulas as worthless tools to analyze the actual employment effects of renewables, because such tools are designed to only produce favorable results. The formulas do not "net out" jobs lost due to increased costs paid by consumers and businesses, higher electrical costs to business production or the "crowding out" of other capital spending by increased investment in renewables.

In summary he said most advocates of job creation almost invariably failed to note the concomitant destruction of jobs in industries whose products are no longer bought because consumers must pay taxes or higher prices for the renewable power. The reality of most renewable electricity, particular from intermittent sources he said is easy to summarize, "it is expensive, undependable and environmentally problematic". And in closing he noted "the wind and solar industry largely exists only because governments can coerce payments for them".

Similarly Canada's Fraser Institute noted in May 2010 "the job counts trumpeted by the Ontario government in support of the green energy program are vacuous. Counting the jobs created ... is meaningless unless the jobs destroyed... are also considered... the government has failed to take into account the jobs destroyed through higher electricity prices to small businesses and consumers". With Ontario now having the highest electricity rates in comparison to all surrounding provinces or states, companies and jobs are leaving Ontario as exemplified in the case of the copper mine in Timmins owned by Xstrata. They closed their Timmins refinery in late 2010 and now ship the ore to Quebec where due to cheaper electricity costs they can refine it for half the price.

Undoubtedly the cost of subsidizing green energy developments with billions of dollars tacked onto our electrical bills increases our cost of living and business production costs. At the time of the passage of the Green Energy Act in 2009 (which coincidentally was pushed through faster than any other bill in the history of Queen's Park) the Province pronounced that the resultant electrical costs would not rise any more than 1% annually and that the current average household electrical payment would not exceed \$2,100 by 2030. However by contrast the Auditor General noted that in 2010 the Ministry of Energy had revised the forecast saying the typical electrical bill would rise 7.9% annually over the next five years with 56% of the increase due to investments in renewable energy. This now equates to a 46% electrical cost increase with an average electrical billing now to reach \$2,500 by 2015.

The real aspect of net job losses due to highly subsidized green jobs was also highlighted in the Provincial Auditor General's report which "noted that studies and other jurisdictions have shown that for each job created through renewable energy programs, about two to four jobs are often lost two other sectors of the economy because of higher electricity prices". The other studies noted include:

- The Economic Impact Of Renewable Energy Policy in Scotland and the UK, March, 2011 by Verso Economics which showed that for every job created in the alternative energy sector, 3.7 jobs were lost in the rest of the economy.

- Another 2011 UK study titled The Myth of Green Jobs by Dr Gordon Hughes, Professor of Economics, University of Edinburgh noted that claims about green energy and job creation rely heavily the upon anecdote, speculation and assertion, so no weight can be attached to figures that are not supported by a proper analysis of the mechanisms by which range of creation is supposed to occur. This study also noted that in order for businesses to offset higher energy costs and stay competitive, their choice is basically to reduce labor rates (wages) or relocate elsewhere and relocation is the likely choice.
- In May 2010 researchers At Italy's Bruno Leoni Institute concluded the that for every green job created by the government, 4.8 jobs are lost elsewhere in the private sector or conversely the same amount of subsidies could have produced 4.8 regular jobs instead of just one green job
- In April 2009 and Spain's Juan Carlos University concluded that Spain, touted as a global leader in green energy had lost 2.2 jobs in its economy for every green job created and only 10% of those jobs turned out to be permanent jobs.
- A few months later, Danish researchers at the Center for Politiske Studier came to the same conclusion as Spain about subsidized wind power from their own country's experience.

In summary Professor Gordon Hughes, one of the UK's top energy and environmental economists and author of the Myth of Green Jobs neatly summed up the jobs issue when he stated last fall:

"The gains for a small number of actual or potential employees in businesses specializing in renewable energy has to be weighed against the dismal prospects for a much larger group of workers in the rest of the manufacturing sector".

Latest Global Wind Energy News and Trends – Sinking Like a Stone!

Investors and politicians can only ignore the latest wind energy trends and information at their own peril. As Lawrence Soloman of Energy Probe stated:

Everywhere it's the same story. Green energy salesmen bamboozle gullible governments into signing cheques in return for empty promises of jobs and growth. As the bills mount, prices rise and the economy sags, the inevitable unraveling begins. It will happen here too. The only question is how many jobs will disappear and how much economic hardship we will put up with before having the common sense to shut the scam down once and for all.

- Jan 17, 2012 , Bloomberg News - With abundant new supplies of gas making it the cheapest option for new power generation, the largest U.S. wind-energy producer, **NextEra has shelved all plans** for new U.S. wind projects next year.
- Jan 16, 2012 - CBS News: **12 US Clean Energy Firms Received \$6.5B** in Taxpayer Money, And Are **All in Financial Trouble**. See News video at :

http://www.cbsnews.com/8301-505263_162-57358484/tax-dollars-backing-some-risky-energy-projects/

- Jan 13, 2012, Bloomberg News - Vesta the world's biggest wind turbine maker is halting production at one factory and **cutting 2,335 staff**, with 1,300 of the job losses hitting Denmark as the company tries to compete with Chinese suppliers. Another 1,600 jobs in the U.S. are at risk as a tax credit supporting the industry ends in December. The company **slashed 4,900 jobs** in 2010 and 2009. After the latest round of cuts, its workforce will number about 20,400. (proposed manufacturer for Windstream offshore wind farm)
- Jan 11, 2012, Reuters - **EU launches WTO suit on Canadian renewable power**. The European Union has escalated a trade dispute over Canadian provincial rules for solar and wind energy subsidies by asking the World Trade Organization to set up a panel to rule on the case, the WTO said on Wednesday.
- Jan 05, 2012, Bloomberg News - Vestas Future Questioned - Vestas, whose **shares have lost 92%** from a 2008 high, blamed higher costs and delayed wind farms, helping drive down shares in rivals Gamesa Corp. Tecnologica SA of Spain and India's Suzlon Energy Ltd. Vestas and U.S. rival General Electric Co. are suffering from slower demand growth and narrowing margins caused by subsidy cuts in Europe and rising competition from Asian turbine makers such as China's Sinovel Wind Group Co.
- Jan 2012, Great Lakes Wind Truth - In New York State during the past fifteen months, **seven lakeshore counties passed resolutions** indicating they didn't want the Great Lakes Offshore Wind (GLOW) project offshore from their county - a 166 offshore turbine project currently being promoted by the New York Power Authority. These decisions came after each county individually

studied all the issues surrounding the pros and cons of an industrial offshore wind project and its potential benefit to the county.

Conclusion

While tilting at windmills may create scorn and ridicule in the short term, true leaders will eventually be praised for their foresight and knowledge of the issues in the long term. If expensive short term job creation was this Council's single determinant for major policy decisions then in retrospect it follows that the notorious Hamilton Harbourgate affair which undoubtedly created jobs would likewise have been supported by current Council members. I think not.

The fate of billions of taxpayer dollars and the overall well being of communities across the Province are being put on the line with the pending Hamilton Council decision on the wind turbine moratorium and the Kingston offshore windfarm consortium resolution. Therefore due to the current state of flux surrounding the global industrial wind turbine industry and the lack of any serious independent social/economic impact studies to support either motion **I respectfully request that the two issues be tabled indefinitely.**

Respectfully Submitted

Neil Switzer OALA/CSLA

Chairman

West Lincoln Glanbrook Wind Action Group

Attachment: (1) – Parker Gallant, "Shining Light on AECOM Report-Windstream Energy/ Wolf Island Shoals Project

Windstream Energy: Wolfe Island Shoals Project

Shining Light on AECOM's Report—Project Number 60188309 by Parker Gallant

The above captioned report was prepared by AECOM using information provided by ORTECH Consulting Inc. and “findings” of the Conference Board of Canada in their report entitled: “*Employment and Economic Impacts of Ontario's Offshore Wind Power Industry*”.

Vested Interest or Objective Report?

We will first demonstrate that this report has been prepared by parties who have a biased perspective to the production of electricity from wind turbines (offshore and onshore) due to their intimate relationship with the sector and the opportunities to benefit financially.

We would note that ORTECH is a member of the Canadian Wind Energy Association (CanWEA) an industry group of over 400 members charged with the responsibility by its members to lobby¹ for the *presumably* profitable establishment of industrial wind turbines. CanWEA's claims are that wind turbines do not generate health problems, do not harm wildlife, generate CO2 free energy and are economic when compared to other energy generation sources. All of the foregoing claims have been dispelled by numerous studies and reports emanating from; scientists, doctors, university professors, professionals, associations, think tanks and many others who dispute the claims made by the likes of CanWEA and those who seek financial gain with the costs of those gains decidedly falling on the backs of taxpayer and ratepayer groups. ORTECH have been involved in several industrial wind turbine developments providing their “expertise” to the placement of wind turbines on the rural landscape with the objective of maximizing the output of those turbines. Two examples where ORTECH have provided “Photomontage” reports are Raleigh Wind Farm and McLean Mountain Wind.

ORTECH's Renewable Energy Group is headed up by Andrew Chant and the bio on their website has this to say about Mr. Chant:

“Andrew Chant is Managing Director Renewable Energy at ORTECH Power. At ORTECH Power Mr. Chant directs a staff of approximately 15 professionals and technicians in all aspects of power development. His specialty is financial and economic analysis with a strong interest in renewable energy policy. Prior to joining ORTECH Power he worked as Director Special Projects for Canadian Renewable Energy Corporation, an ORTECH affiliate later acquired by Canadian hydro Developers, Inc. now part of TransAlta. Canadian Renewable was active in developing the original Wolfe Island Wind Farm as well as several other wind and small hydro sites. Mr. Chant holds degrees in law and business and previously practiced as a corporate tax lawyer. His subspecialty is poking fun at engineers.”

We would note that Canadian Renewable Energy Corporation developed the Wolfe Island 197.8 MW industrial wind turbine site which has been castigated by Nature Canada as the “Most Deadly Wind Plant in Canada” for birds and bats.

AECOM also have a similar interest in industrial wind turbine developments as noted in their website per the following;

“AECOM delivers comprehensive wind and solar services from inception to completion through our

program management and technical services. Our broad range of project management services, coupled with our technical resources, allows us to thoroughly plan, develop and execute environmental and permitting, engineering/design, procurement, construction, and commissioning."

AECOM has been involved in the planning, development, permitting, engineering and construction of more than 21,500 MW of wind power worldwide.

Clearly both parties involved in the preparation of this report have a vested interest in the success of this venture despite the existing moratorium on offshore wind turbine installations by the Government of Ontario pending further studies.

One sided Economics

The captioned report in it's "Executive Summary" indicates:

⑩ The number of jobs created over the 5 year construction period will be 1900 in Ontario with projected labour income of \$89 million. Based on this forecast the annual income per job generated is \$46,842. per job which indicates this labour will not be well paid.

⑩ The other jobs that will also be created according to this forecast is 175 jobs on a permanent basis and presumably relates to maintenance of the wind turbines in this array of 100/150 turbines. This forecast is far above the experience of other wind turbine developments which normally create one (1) maintenance job for each 10 turbines so this number appears to be greatly exaggerated as we would expect to see only 10 to 15 permanent jobs rather than the number claimed in this report. Based on the forecast those 175 jobs will earn an average of \$51,428. for each of these *permanent* positions.

Offshore wind developments are one of the most expensive forms of producing energy according to the Institute for Energy Research (IER) in the US with an all in levelized unit energy cost (LUEC) of about \$2.5 million per MW. This report indicates the installation cost of the 300 MW of rated wind capacity on the Wolfe Island Shoals will be \$4.5 million per MW of rated capacity. This would appear to be a very high estimate, perhaps with the intention of showing a greater capital investment then will actually be required. If one uses the IER, LUEC costs the total capital investment will actually be closer to \$750 million or about the same amount (\$700 million) this report claims will remain in Ontario.

Now lets look at the value of the production that this 300 MW of offshore wind will produce under the contract terms that Windstream Energy have under the feed-in-tariff (FIT) program.

First we need to look at the likely production of electricity from the 300 MW and to do that we need to estimate the likely production level of rated capacity as the wind doesn't always blow. Ontario's experience with wind production indicates that it produces electricity at approximately a 27% **average** of rated capacity. If one allows for slightly higher production offshore of say a 30% **average** the 300 MW of industrial wind turbines should produce 786,600 MWh (megawatt hours). On an annual basis that production will be worth approximately \$150 million per year or \$3 billion over the 20 year term of the contract as the FIT price schedule indicates offshore wind is paid \$190. per MWh.

Calculation: 300 MW X 30 % X 8740 (hours) X \$190 = \$149,454,000 X 20 years =\$2,989,080,000.

Capital Costs recovered:

per AECOM's estimate: 9.1 years
per IER's estimate: 5.0 years

Experience around the world and in Ontario has proven that the wind seldom blows at peak demand

times (summer months, etc.) which therefore means we must have reserve capacity to back it up. In most countries this has taken the form of gas generation. Estimates from reliable energy experts such as E.ON of the UK have noted that wind needs backup for at least 90 % of rated capacity. The LUEC cost of gas peaking plants are less (\$1 million per MW) but basically duplicate the wind capacity and must be available as wind production can be as low as 1% and at times as high as 80% of rated capacity. When gas generation is idle they still must be paid as much as \$90. per MWh raising the cost of wind production through that addition makes it \$280.00 per MW. The additional cost to the gas generators is therefore:

Calculation: 300 MW X 30 % X 8740 (hours) X \$90 = \$70,794,000 X 20 years = \$1,415,880,000

Costs to Ratepayers per Annum:

Wind Production	\$ 149,454,000
Gas Backup	<u>\$ 70,794,000</u>

<u>Total Costs</u>	<u>\$ 220,248,000</u>
---------------------------	------------------------------

The two forecasts of jobs in the “Executive Summary” equal 13,500 man years of employment or an average of 650 jobs per annum generating average employment earnings of \$48,077 but the costs to ratepayers will be \$338,884,308² for a net cost per job of approximately \$280,000.

Energy Costs

The Independent Electricity System Operator (IESO) issued a press release January 6, 2011 in which our production and consumption levels were identified for the year ended December 31, 2011. Also noted in this release was the average cost of power made up of the hourly Ontario electricity price (HOEP) also referred to as the “market price” and the Global Adjustment (GA). The HOEP was 3.15 cents per kWh (\$31.50 per MWh). AECOM though their efforts of using this report want ratepayers to pay an extra 15.85 cents per kWh (\$158.50 per MWh) for the production that would come from Windstream Energy versus what the market tells us the power is actual worth.

The foregoing represents the subsidy that Ontario's ratepayers would have to pay if Windstream Energy is allowed to proceed with the project and would cost the ratepayers of Ontario \$124 million annually. The foregoing is without factoring in the cost of transmission spending to bring the power to households.

We don't need jobs that will cost the ratepayers and taxpayers of Ontario these excessive monies and will drive further jobs from the province due to high electricity costs.

Prepared by:

Parker Gallant, January 12, 2012

Retired banker, Financial Post Comment Writer, Director, Wind Concerns Ontario & Energy Probe.

1. Represented by Sussex Strategy whose plan was “to dupe public about green energy costs”.
2. \$220,248,00 divided by 650 jobs.