

## **OFA position statement on Industrial Wind Turbines**

**January, 2012**

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The Ontario Federation of Agriculture (OFA) supports the intentions of the Green Energy Act. We agree that Ontario needs to secure affordable and renewable energy for its future while reducing green house gas emissions. We encourage efforts to replace imported power, facilitate conservation and stimulate economic development through our energy requirements.

However, the situation regarding Industrial Wind Turbines (IWT) has become untenable. The proliferation of wind turbines across rural Ontario has seriously polarized our rural communities. Residents not engaged in turbine developments have been pitted against neighbours, over concerns with health impacts and quality of life issues. IWT development currently preoccupies the rural agenda.

However, the expansion of Ontario's dependence on wind turbines as a source of energy has been shown to be inefficient. Wind power is not dispatchable power. That means it is available only when the wind blows with it being highly unlikely this coincides with peak power usage at any time, let alone on a regular basis.

The Ontario Auditor General's 2011 Annual Report highlighted this significant weakness in the developing green energy system. Data in the report indicates IWT operate at a power capacity factor of 28% but have only 11% availability at peak demand due to lower wind output during the summer months. The seasonal fluctuation ranged from <1% on summer days when power demand is high, to 94% on winter days during low demand periods. An inverse relationship was observed between daily average wind output and daily average power demand – an effect referred to as “surplus base-load generation.”

Although potentially economical as a peak power provider, wind generation is not presently capable of being such. Consequently, wind power is a costly means of generation as its output is most often sold at a loss on export markets. This cost to provincial customers comes with the significant externalities noted above.

In addition, technical concerns remain unaddressed with regards set-back issues, induced current and noise impacts.

The OFA believes that the amendments to the Planning Act made under the authority of the Green Energy Act are not having the desired effect of providing for good planning. Removal of municipal input into IWT projects has alienated the rural population and ignored competing community needs and policies.

It is not appropriate to take the decision role entirely outside the hands of municipalities. The use of site plan approval and site plan agreements under the Planning Act would enable agreement on final design and setbacks and provide a framework for the municipality to ensure appropriate treatment of matters such as road access, drainage, and proximity to property boundaries and natural heritage features. A balance between the province's power requirements and local autonomy regarding land use must be struck.

As a result, the Ontario Federation of Agriculture respectfully and strongly recommends that the province of Ontario suspend the award of FIT contracts for industrial wind turbine development projects pending resolution of the following:

- Because IWT projects can have a significant and lasting impact on neighboring farm businesses with regards future expansion and succession planning, the Ontario government must enable an acceptable level of planning control for IWT at the municipal level.
- Prices paid for IWT power (and indeed, all renewable power) should not exceed the expected price of peak power imports six years in the future, to ensure a long term supply or reasonably priced power.
- The province must require IWT developments to secure the capacity to provide dispatchable power using battery or other such environmentally acceptable storage.
- Wind turbine developments must be required to use sufficiently gauged service lines and sufficiently high capacity transformers to eliminate current inducement in adjacent lines or buildings by IWT collection lines.
- Rural residents' health and nuisance complaints must be immediately and fairly addressed.
- Because varying conditions and larger generating equipment can create exceptions to a maximum of 40 dba at a minimum setback of 550 meters for an IWT development the province must conduct a comprehensive analysis using local empirical data and international studies on adequate setback distances for IWT based on the technology employed.
- The regulation governing participating receptors must be amended to require the appropriate minimum setback, determined through analysis, for all IWT developments.
- To directly address the real issue of noise levels and to ensure that the 40 dba guideline is achieved across Ontario, the provincial government must develop and implement a protocol to measure noise from IWT developments, including continuous tone and low frequency noise and that measurement equipment and training be made available to municipalities.

OFA supports green energy but is working to ensure that green energy projects will respect concerns for noise, community involvement and price, balanced against the effective provision of power.