
OFA Industrial Wind Turbine Policy

The Ontario Federation of Agriculture's Industrial Wind Turbine Policy considers increased renewable energy generation facility procurements planned through the Independent Electricity System Operator's (IESO) Long-Term energy and capacity requests for proposals through 2050.

Municipal and Local Decision of Support

A balance between provincial energy planning and local autonomy on land use is paramount.

- **OFA recommends** continuing to require local government decision-making as to whether to host Industrial Wind Turbines or oppose them, as a cornerstone of the procurement process.
- **OFA supports** the use of site plan approvals and agreements under the *Planning Act* on final design and setbacks, to ensure appropriate treatment of matters such as road access, drainage, and proximity to property boundaries and natural heritage features.

Land Use and Farmland Protection

- OFA recommends that regulators and the Ministry of Energy prioritize the siting of all energy infrastructure on commercial and industrial land and not allow siting in Prime Agricultural Areas, with the exception of facilities that demonstrate on farm diversified use, related or integral to the farm operation.

Only after alternative locations have been evaluated, and there are no reasonable alternative locations which avoid prime agricultural areas, or prime agricultural areas with lower priority soils, should rural lands be considered for siting energy infrastructure.

- **OFA recommends** this evaluation be verified through the use of an Agricultural Impact Assessment (AIA) or similar process undertaken by certified professionals, at the expense of the proponent, and accepted to the satisfaction of the local government. This process demonstrates avoidance of Prime Agricultural Areas, and where avoidance is not possible, reduction and mitigation of any impacts including farmland reclamation impacts at decommissioning. The process is meant to ensure the avoidance of siting infrastructure within Ontario's finite and declining farm land inventories.
- **OFA recommends** projects supported by the local government that, through the AIA review, were determined to be related or integral to a farm operation, be awarded equal criteria ranking through IESO proposal reviews, as projects that avoided Prime Agricultural Areas. Examples considered to be related to or integral to a farm operation, include
 - i. a dairy operation that uses an anaerobic digester to treat manure, producing a digestate for land application, and biogas that is a fuel used to produce electricity, and
 - ii. a greenhouse operation that uses a Combined Heat and Power system to produce CO₂ for crop production, and uses some of the generated heat to produce electricity.

Minimum Distance Setback (MDS) Noise Requirements

- **OFA recommends** Industrial Wind Turbine projects be required to conduct and report actual receptor measurement tests to ensure appropriate minimum setbacks that may be larger than 550 meters are determined through empirical evidence instead of modelling analysis.

Industrial Wind Turbine setback regulations are based on the potential to sustain an instantaneous maximum of 51 dba at receptors and to not exceed 40 dba on average for any hour, measured as the reduction of noise over distance, given a maximum noise of 107 dba at a turbine hub. While newer larger equipment does not exceed 107 dba at the hub, larger blades may cause anomalies.

- **OFA recommends** participating receptors be included in minimum distance setback noise requirements.

In Ontario, noise receptors within a property hosting an Industrial Wind Turbine project, referred to as *participating* receptors, are not protected by MDS noise requirements and are incentivised to waive noise setback requirements. Setbacks for *participating* receptors are fixed by site estimation of the setback distance needed to meet the 40 dba maximum average for an hour of noise exposure.

- **OFA recommends** the provincial government develop and implement a protocol to measure continuous tone and low frequency noise from Industrial Wind Turbine developments and ensure measurement equipment and training is made available to municipalities, to ensure the 40 dba noise level guideline is achieved across Ontario.

Groundwater Protection Requirements Related to the All-Hazard Investigation Report

- **OFA recommends** the Ministry of Energy and the IESO exclude Industrial Wind Turbine proposals sited in areas with a highly vulnerable aquifer, pending a decision by the provincial government to extend analysis conducted for the All-Hazard Investigation of Well Water in Chatham-Kent, to include analyzing undissolved sediments in well water samples, as recommended by the panel and initially included in the scope of the investigation.

Additional Groundwater and Potable Water Protection Requirements

- **OFA supports** the use of water quality testing and flow monitoring prior to the construction of an Industrial Wind Turbine facility to provide a qualitative and quantitative baseline.
- **OFA recommends** that if an impact on a water supply feature is identified as significant then appropriate remediation must be identified by the project applicant within the Renewable Energy Approval process. For example, this would include a private water supply having mitigation against deterioration in either the quality and/or the sufficiency of the supply.
- **OFA recommends** monitoring, testing and remediation costs be borne by project owners and operators throughout the span of construction, operation, and decommissioning. OFA recommends that monitoring, testing and remediation be conducted Ontario Ministry of Health sanctions persons.

Grid Connection Standards

- **OFA recommends** all renewable electricity transmission or distribution grid connections use sufficiently gauged service lines and capacity transformers to eliminate current inducement from power generation and inverter collection lines.
- **OFA recommends** projects sited in rural farm areas be required to conduct uncontrolled ground current testing prior to construction and throughout facility operation in accordance with Distributor Investigation Procedure in Appendix H of the Ontario Distribution System Code, and be held accountable to mitigate any uncontrolled ground current caused by Industrial Wind Turbines and associated equipment.

Decommissioning and Reclamation

Industrial Wind Turbines use a substantial quantity of concrete and iron reinforcement for Industrial Wind Turbine foundations. At decommissioning, it is monetarily prohibitive to restore the foundation area to the pre-construction state.

- **OFA recommends** proponents be required to restore the area by removing as much of the foundation as possible and to financially compensate farmland owners for the permanent loss of productive farmland.