



## WIND TURBINE INSTALLATIONS IN RESIDENTIAL AREAS

### THE ISSUE

Wind turbines, or wind facilities, in residential areas, or in close proximity to residential areas.

### THE GREEN ENERGY & ENVIRONMENT ACT

The *Green Energy and Green Economy Act, 2009*, amended the *Planning Act, R.S.O. 1990*, so as to preclude the operation of official plans and local zoning by-laws as they relate to renewable energy undertakings. Further, the *Green Energy and Green Economy Act* (the “Act”) permits a person to engage in a renewable energy project despite any restriction established by a municipal by-law. In effect, the *Act* puts aside municipal regulations, such as municipal zoning by-laws, that would otherwise regulate buildings or structures, including those in residential neighbourhoods, or in close proximity to residential neighbourhoods.

Renewable energy undertakings that are wind related and have a plate capacity of less than 3 kW (Wind Facility (Class 1)) do not require a Renewable Energy Approval (REA) from the Ministry of the Environment (MOE).

Renewable energy undertakings that are wind related and have a plate capacity of greater than 3 kW but less than 50 kW (Wind Facility (Class 2)) require a REA from the MOE.

Typically, Class 1 and 2 wind facilities are structures of some height, in excess of 20.0 metres so as to be able to “capture the wind”.

An extract from the “Provincial Approvals for Renewable Energy Projects” guide is found below.

### When a facility requires a Renewable Energy Approval, and when it does not

Certain types of projects are exempt from the need to get an REA because they are small or because they are regulated by other means.

Is a Renewable Energy Approval required?			
Yes	No	Comments	
Wind	<ul style="list-style-type: none"> <li>Wind facilities (Class 1) with a name plate capacity greater than 3 kW</li> </ul>	<ul style="list-style-type: none"> <li>Wind facilities with a name plate capacity less than or equal to 3 kW</li> </ul>	<ul style="list-style-type: none"> <li>Wind facilities equal to or less than 3 kW are typically purchased at hardware and outdoor stores</li> <li>Class 1 turbines mounted on buildings may require building permits. For more information, contact the local municipal building department</li> </ul>
	<ul style="list-style-type: none"> <li>Wind facilities (Class 2) over 3 kW but less than 50 kW have fewer pre-submission requirements and do not need to meet the noise, property and road/rail setbacks</li> </ul>		<ul style="list-style-type: none"> <li>Wind facilities greater than 3 kW and less than 50 kW are produced by a number of Ontario and international manufacturers for residential, commercial and agricultural applications. While they do not need to meet setbacks, they are required to adhere to a streamlined set of requirements to comply with provincial noise limits</li> <li>The structures supporting Class 2 wind turbines require municipal building permits under the Building Code Act, 1992</li> </ul>

As the reader will note, Wind Facilities (Class 2) “have fewer pre-submission requirements and do not need to meet noise, property and road/rail setbacks”.

It is interesting to note that a small accessory structure in a residential area, which may be less than 10.0 square metres in area and therefore not require a permit pursuant to the *Building Code Act*, that has a height of greater than 4.5 metres, would require in most municipalities in Ontario relief from the local zoning by-law and be subject to a public process however, a wind facility in a residential area having an unlimited height or mass, would not be subject to a public process.

## **BILL 2, RESTORING PLANNING POWERS TO MUNICIPALITIES ACT, 2013**

Earlier this year, Simcoe Grey MPP Jim Wilson, introduced Bill 2, *Restoring Planning Powers to Municipalities Act, 2013*. This Bill proposed amendments to the *Planning Act* to reverse the effect of the amendments made to the Act by Schedule K to the *Green Energy and Green Economy Act, 2009*, which exempted renewable energy undertakings from the normal application of the *Planning Act*, including policy statements, provincial plans, official plans, demolition control by-laws, zoning by-laws and development permit regulations and by-laws.

This Bill received First Reading on March 26, 2013 and lost on division at Second Reading on April 18, 2013

## **TOWN OF THE BLUE MOUNTAINS COUNCIL RESOLUTION**

In response to a proposed wind facility installation in a residential area in the Town of The Blue Mountains without local consultation (see the Case Study found later in this paper), and opposed to by the neighbourhood, Council of The Corporation of the Town of The Blue Mountains ("Town") adopted the following motion:

**WHEREAS** the *Green Energy and Green Economy Act, 2009*, amended the *Planning Act*, R.S.O. 1990, so as to preclude the operation of official plans and local zoning by-laws as they relate to renewable energy undertakings;

**AND WHEREAS** the *Green Energy Act, 2009*, permits a person to engage in a renewable energy project despite any restriction established by a municipal by-law;

**AND WHEREAS** the installation and use of a wind facility must conform to the *Environmental Protection Act*, R.S.O. 1990, as it relates to the prohibition to discharge a contaminant into the natural environment, if the discharge causes or may cause an adverse effect;

**AND WHEREAS** the installation and use of any wind facility in an area zoned residential, or in close proximity to an area zoned residential, may cause an adverse effect within the meaning of the *Environmental Protection Act*, specifically noise;

**AND WHEREAS** the Minister of Energy in his directive MC-2012-1071 directed the Ontario Power Authority not to enter into FIT or microFIT contracts for wind generation facilities up to and including 3 kW where those facilities are located on property that is zoned for residential use, or borders a property zoned to permit a residential use and thereby acknowledges the adverse effect that wind generation facilities may have on property that is zoned for residential use;

**AND WHEREAS** Bill 2, *Restoring Planning Powers to Municipalities Act*, 2013 received First Reading on February 20, 2013;

**AND WHEREAS** Bill 2, *Restoring Planning Powers to Municipalities Act*, 2013 would, if enacted, amend the *Planning Act* to reverse the effect of the amendments made to the Act by Schedule K to the *Green Energy and Green Economy Act*, 2009, which exempted renewable energy undertakings from the normal application of the *Planning Act*, including policy statements, provincial plans, official plans, demolition control by-laws, zoning by-laws and development permit regulations and by-laws;

**AND WHEREAS** Council of The Corporation of The Town of The Blue Mountains supports Bill 2, *Restoring Planning Powers to Municipalities Act*, 2013;

**NOW THEREFORE** Council of The Corporation of The Town of The Blue Mountains hereby requests that the Province of Ontario immediately enact Bill 2, *Restoring Planning Powers to Municipalities Act*, 2013;

**AND THAT** The Council of the Corporation of The Town of The Blue Mountains hereby directs that this resolution be circulated to the Premier, Ministers of Energy, Municipal Affairs & Housing and Rural Affairs, The Association of Municipalities of Ontario (AMO), The Ontario Small Urban Municipalities (OSUM) of Ontario, the County of Grey and all municipalities in Grey County.

## SUMMARY

The notion of large wind turbine structures located on properties that are zoned for residential use, or border a property zoned to permit a residential use, without public input is extremely problematic for the Town.

The Town, like most municipalities, prides itself on local engagement and input. The *Green Energy and Economy Act* removes public input on issues that are most sensitive to the residents of Ontario, specifically what is going on in their backyards.

As noted previously, most municipal zoning by-laws regulate the placement of buildings and structures on land so as to mitigate potential impacts.

Bill 2, or a revised Bill, specifically addressing local authority over wind turbines and related structures located on property that is zoned for residential use, or bordering a property zoned to permit a residential use, is necessary and is in the best interests of Ontarians.

## THE BLUE MOUNTAINS CASE STUDY

### PROPOSED WIND TURBINE INSTALLATION IN A RESIDENTIAL AREA

#### THE ISSUE

The proposed installation of a wind turbine on a structure approximately 20 metres tall in a residential neighbourhood in The Town of The Blue Mountains, Ontario.

#### THE SITE

The subject site is located in a residentially designated (Residential Infilling - RI) and residentially zoned (Residential Third Density Zone - R3) neighbourhood in a Registered Plan of Subdivision, being Lot 22, Plan 963, The Town of The Blue Mountains (Town), County of Grey.



----- Depicts Lot 22, Plan 963, The Town of The Blue Mountains (Craigleith)

## The Proposed Wind Turbine

The initial proposal was for a wind turbine with a plate capacity of 3.5 kW and was proposed to be mounted on a tower having a height of approximately 20 metres and located within close proximity to the neighbouring dwelling.



( ) Depicts proposed Wind Turbine Location

## ***The Green Energy & Environment Act and the Renewable Energy Approval Process***

The *Green Energy and Green Economy Act*, 2009, amended the *Planning Act*, R.S.O. 1990, so as to preclude the operation of official plans and local zoning by-laws as they relate to renewable energy undertakings. Further, the *Act* permits a person to engage in a renewable energy project despite any restriction established by a municipal by-law. In effect, the *Green Energy and Green Economy Act* put aside municipal regulations that would otherwise regulate the structures (such as municipal zoning by-laws).

Renewable energy undertakings that are wind related and have a plate capacity of greater than 3 kW are defined through the REA process as a Wind Facility (Class 2) and therefore require a Renewable Energy Approval (REA) from the Ministry of the Environment (MOE).

The Renewable Energy Facilitation Office (REFO) advised that this installation would follow the simplified process and that there are no mandatory setbacks (or other real regulations) and there is no opportunity for public input in advance of the consideration or issuance of the REA.

In a subsequent dialogue with the MOE, and notwithstanding the reference noted above, the Town was advised that certain Noise-Performance Limits in accordance with the MOE's Noise Guidelines would have to be adhered to. However, provided a Class 2 Facility can meet the applicable Provincial guidelines and regulations, including Noise-Performance Limits, a Renewable Energy Approval would be issued and a wind turbine erected without local input.

## ***Construction of the Wind Turbine & the Building Code Act***

On or about September 20, 2013, the Town was advised of the commencement of the installation of a wind turbine (large excavation to accommodate the footings/foundation of the structure). In response, the Town's Municipal Law Enforcement Officer (MLEO) attended the site and confirmed the commencement of construction. In his attendance, the MLEO was



confronted by a group of local residents who were quite concerned about the installation and the potential impact on the neighbour and the neighbourhood. These concerns included noise, disturbance related to vibration, proximity of the structure to a dwelling and visual impact.

*It is noted that the subject site is located in the Niagara Escarpment Plan Area with one of the objectives of the Plan being "To maintain and enhance the open landscape character of the Niagara Escarpment in so far as possible... and by preserving natural scenery." Further, it is noted that the subject site is located outside of the Niagara Escarpment Commission's (NEC) Development Control Area and therefore a Development Permit was not required from the NEC.*

Following an investigation it was determined that the proponent intended on installing a wind turbine with a plate capacity of 3.5 kW with it being noted that the materials for the tower were on-site and assembled. In response, the Town's Chief Building Official issued an Order to Comply pursuant to the *Building Code Act* as work was proceeding in advance of the necessary permit (the *Building Code Act* requires a permit for a wind turbine with a plate capacity in excess of 3 kW).

The pre-requisites for a permit pursuant to the *Building Code Act* are demonstrating compliance with the structural provisions of the Building Code and a REA (compliance with "applicable law" as set out in s. 8 (2) (a) of the *Building Code Act* with "applicable law" defined at s. 1.4.1.3.(1) of the Building Code with reference to s. 47.3 of the Environmental Protection Act found at s. 1.4.1.3.(1)(a)(vi.1)).

As noted previously, a renewable energy undertaking that is wind related and that has a plate capacity of greater than 3 kW is defined through the REA process as a Wind Facility (Class 2) and therefore requires a REA from the MOE.

Given the requirement for a REA, work stopped on the installation of the wind turbine.

## REA

A pre-requisite for a permit pursuant to the *Building Code Act* is a REA.

Subsequent to dialogue with MOE staff, the proponent determined not to proceed with the REA for a wind turbine with a plate capacity of 3.5 kW. The explanation provided by MOE staff was that the proponent was not interested in pursuing the approval due to the noise modeling requirements and the unlikely ability to acquire a REA due to non-compliance with the Noise Guidelines.

To-date, the proponent has not pursued the necessary REA for the wind turbine that is a Wind Facility (Class 2).

## Revised Proposal

The Town has been advised that the proponent has determined to proceed with a wind turbine with a plate capacity of 1.5 kW, with same being erected on a tower approximately 20 metres in height, further distant from the neighbouring dwelling (being a Wind Facility (Class 1)).

In the instance of a wind turbine with a plate capacity of 1.5 kW, municipal approvals, permits pursuant to the *Building Code Act* and a REA are not required.

The MOE has advised that notwithstanding the above, the proponent continues to be required to comply with the *Environmental Protection Act* (EPA), specifically s. 14(1) which addresses the discharge of contaminant's to the natural environment if the discharge causes or may cause an adverse effect.

### *Environmental Protection Act*

14. (1) Subject to subsection (2) but despite any other provision of this Act or the regulations, a person shall not discharge a contaminant or cause or permit

the discharge of a contaminant into the natural environment, if the discharge causes or may cause an adverse effect. 2005, c. 12, s. 1 (5).

### **Exceptions**

- (2) Subsection (1) does not apply to,
- (a) a discharge that is authorized under this Act or the *Ontario Water Resources Act*, if the discharge does not cause and is not likely to cause an adverse effect; or
  - (b) a discharge of a contaminant that arises when animal wastes are disposed of in accordance with normal farming practices, if the only adverse effect that is caused or that may be caused by the discharge is an adverse effect referred to in clause (a) of the definition of “adverse effect” in subsection 1 (1). 2005, c. 12, s. 1 (5).

(emphasis added)

## **Appropriateness of Wind Facilities on Lands Zoned Residential**

Through this proposed installation, it became apparent that there are considerable concerns related to the appropriateness of a wind facility installation on lands that are zoned residential.

Most municipal zoning by-laws regulate the placement of buildings and structures on land so as to mitigate potential impacts. In the Town’s instance, not only does it regulate the main building or structure, the Town’s zoning by-laws regulate the location, height and size of accessory buildings or structures.

Throughout Ontario municipalities have implemented zoning regulations to address conflict between land uses and to regulate the size and location of buildings and structures. The REA process for wind facilities of less than 50 kW does not take into consideration the concerns of local, potentially impacted residents.

It is noted that Minister of Energy in his directive MC-2012-1071 directed the Ontario Power Authority not to enter into FIT or microFIT contracts for wind generation facilities up to and including 3 kW where those facilities are located on property that is zoned for residential use, or borders a property zoned to permit a residential use. This directive certainly took into consideration the local impact on an area zoned for residential use or on a property that borders a property zoned to permit residential use.