



**International Power**

# Common Misperceptions of Wind Energy

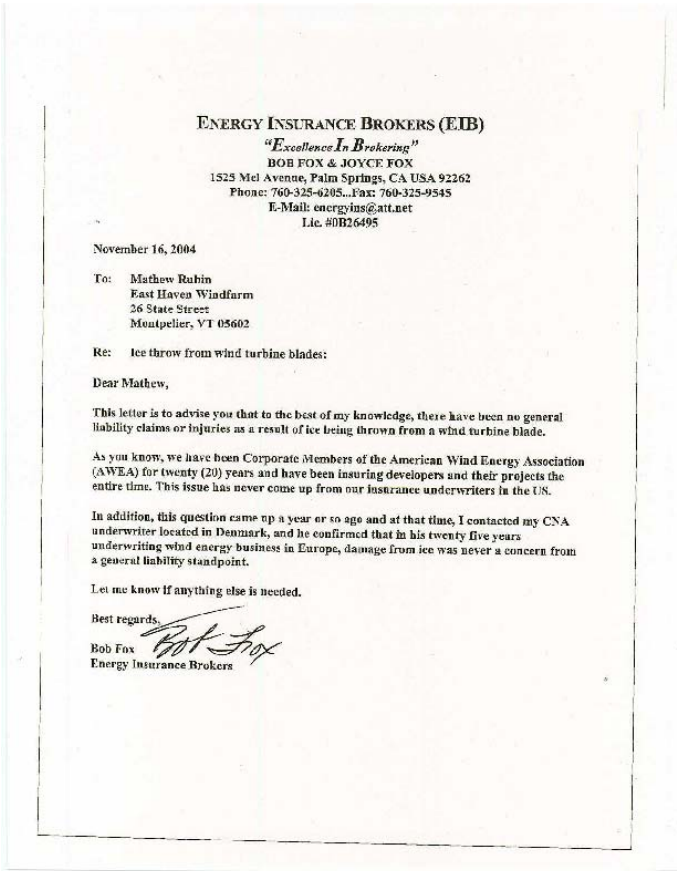
## Site Reclamation

Goal: restore equivalent ecosystem status on all disturbed sites.

- At turbine and rotor assembly areas and alongside access roads
- Salvaged subsoil will be replaced with topsoil and organic material
- An erosion control seed mix will be applied in areas of erosion risk.
- Re-contouring to compliment natural drainage patterns
- General soil handling plans
- Re-vegetation prescriptions

## Project Footprint and Loss of Land : Lowbanks Wind Farm Example

	Construction	Operations
<b>Access Roads</b>		
Total length – 5.1 km	5.1 km	5.1 km
Width during construction	10m	5 m
<b>Footprint</b>	<b>5.1 ha</b>	<b>2.6 ha</b>
<b>12 Turbine Sites</b>		
<b>Footprint</b>	<b>12 ha</b>	<b>0.04 ha</b>
<b>Electrical System</b>		
Collector system – overhead and underground (length)	12.8 km	12.8 km
Switching station	300 m <sup>2</sup>	300 m <sup>2</sup>
<b>Footprint</b>	<b>0.03 ha</b>	<b>0.03 ha</b>
<b>Total Footprint</b>	<b>17.1 ha</b>	<b>3 ha</b>



## Ice Throws

- International Power Canada, Inc. would shut down the turbines if ice accumulates on the blades —thereby minimizing risks associated with ice throws.
- The Exhibition Place turbine in Toronto, close to the Lake shore and the Gardiner Expressway, has not had accidents involving ice throws.
- If excessive ice accumulates on the blades, it could destabilize the rotor, shutting the wind turbine down—minimizing the hazard of ice throws.

### Blade Appearance

Turbine blades are covered with a shade of matte white paint, as specified by the manufacturer. This paint minimizes glinting effects during periods of clear skies.

### Local Road Damage and Upgrade

- If required, unpaved roads will be upgraded to comply with standards for wind energy project construction.
- After construction, all municipal roads used for the Project will be inspected and repaired if damages were caused.

### Potential For Epileptic Seizures

- Photosensitivity affects 3 to 5% of those with epilepsy
- Photosensitive individuals should not be exposed to flashes greater than 3 Hz
- Seizures are most likely triggered at frequencies between 5 and 30 Hz
- Wind turbines nominal rotational speeds are between 10.8 to 14.4 rpm
- Considering all three blades, flicker frequency from wind turbines is between 0.6 Hz and 1Hz. **Frequency is not sufficient to trigger epileptic seizures.**

Source: American Epilepsy Foundation, Epilepsy foundation of America Working Group, Vestas

Prepared by:

