

Submission Re: Renewable Energy Amendment (Excessive Noise from Wind Turbines) Bill 2012.

We support the Bill for the following :-

Our Objections to the Excessive Noise from Wind Turbines

Sleep deprivation from the constant whoosh and thump as the blades pass the nacelle and rotate at very high speed.

It was shown by G.P, Van den Berg – Faculty of Mathematics and Natural Science University of Groningen that the presence of low frequency components in wind turbine noise establishes that measurable low frequency noise is present and is relevant to the audible noise nuisance commonly reported.

This is reinforced doubly shared by many acousticians with regard to the continuing usefulness of current UK noise regulations relating to wind turbines which the ETSU refer to older and smaller turbines. It had been assumed that low frequency sound from wind turbines had not been a major factor contributing to annoyance as the blade passing frequency is of the order of one hertz where the human auditory system is relatively insensitive. This argument can now be seen to obscure a very relevant effect: the blade passing frequency modulates well audible higher frequency sounds.

Residents near turbines say that the turbine sounds acquire a distinct ‘beating’ character, the rhythm of which is in agreement with the blade frequency and this effect is stronger for modern tall wind turbines.

Professor P. Styles and team from Keele University UK, have recently published a major study on 60 metre high wind turbines at Dunfaw Scotland. When wind farms start to ( even low wind speeds) generate considerable infrasound and acoustic signals that can be detected at considerable distances (many kilometres) from wind farms on infrasound detectors and on low frequency microphones.

Earlier studies conclude no significant risk to human health (studies are dated) and refer to older, smaller turbines. Concerns are increased as most modern turbines are in excess of 100 metres (much bigger than those at Dunfaw) and developers are proposing siting as close as 650 metres from habitation. (In some cases closer.)

Professor Flowcs-Williams Emeritus Prof. of Engineering univ.

Cambridge one of the UK’s leading acoustical experts and advisor to the REF. states regulations are dated and in other ways inadequate. It is known that modern wind turbines do cause problems which many think current guidelines fail adequately to protect the public.

The main effect of noise from turbines is sleep deprivation due to the constant sounds is like a form of torture there is no relief like an airport where noisy jets come and go yet still cause noise issues with nearby residents

Sleep deprivation has 10 top side effects :-

1. Impaired alertness, productivity making daily activities more prone to accidents, fatal mistakes and poor quality of life
2. Blurred vision, slurred speech, muscle weakness, headaches and general irritability reported in some people.
3. Weight gain as people tend to develop unhealthy food cravings in search to find comfort as compensation for tiredness
4. Weakened immune system making people more prone to getting sick as the body's defence mechanism is down
5. Higher risk for heart disease, diabetes and in some cases stroke.
6. In severe cases causes sleep depression and making it harder to fall asleep
7. Mental health problems can be triggered by sleep deprivation  
Needs careful evaluation by a psychiatrist
8. Hallucinations are common if people are unable to sleep for a number of days.
9. Sleep deprivation in children can manifest in hyperactivity or even ADD.
10. Last and most serious is sleep deprivation coma. When bodily functions are shut down as a defence mechanism.

Definition from the Internet of Sleep Deprivation Symptoms. Wikipedia 2012.

Maureen Campbell  
John Foster