

Western Morning News

NOISY NEIGHBOUR ON THE HORIZON

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With the prospect of Devon's first windfarm looming closer, new research reveals some very real fears over noise problems. Neil Young reports

New research has backed up claims that the noise from wind turbines could pose risks to health that have largely been ignored. NEW research has backed up claims that the noise from wind turbines could pose risks to health that have largely been ignored.

The dangers to health were highlighted last November by Plymouth doctor Amanda Harry in an exclusive report for the Western Morning News.

Her independent research looked at the health problems of people living as close as 300 metres to the Bears Down windfarm, near Padstow in Cornwall.

Dr Harry found that 93 of the people she questioned were experiencing more headaches than usual.

Over 70 per cent were having problems sleeping, and were suffering from anxiety symptoms.

They said the turbines caused headaches, migraines, nausea, vertigo and disorientation.

One couple, Colin and Cathy Bird, found the effects so distressing that they went to stay in bed and breakfasts when the noise from the wind was greatest.

Now Dr Harry's findings have been supported by extensive research by G P Van den Berg, a physicist at the University of Groningen in the Netherlands.

His research is likely to intensify the debate over the impact of turbines on people living close by.

In an article in the Journal of Sound and Vibration, 277 (2004), pages 955-970, Mr Van den Berg reported on sound measurements around the Rhede windfarm (an installation of 17 turbines), on the Dutch/German border.

"Residents living 500 metres and more from the park have reacted strongly to the noise, and residents up to 1,900 metres distance expressed annoyance," he said.

"Yet conventional wind industry calculations have assumed that turbines would present no noise problem over 500 metres."

He discovered that the methods used by wind turbine developers, both in the United Kingdom and elsewhere, to predict noise were seriously flawed because of their assumption that wind speeds measured at a height of ten metres were representative of wind speeds at the greater heights of modern turbines (which are often 100 metres and above).

At night, even though wind speeds may fall at ground level (to near zero), they

remained fast enough at 60 metres (and above) to turn the turbine blades.

His measurements showed that wind speeds at night were up to 2.6 times higher than expected.

Consequently, against expectations, the turbines were turning at night and the noise propagating down into an area at ground level where there was no background noise to mask it.

Mr Van den Berg's findings concluded: "The number and severity of noise complaints near the wind park are at least in part explained by the two main findings of this study; actual sound levels are considerably higher than predicted, and wind turbines can produce sound with an impulsive character."

He also believes that infrasound is very probably a significant feature in the audible noise problem.

His findings were yesterday welcomed by the Renewable Energy Foundation, led by Campbell Dunford and Devon-based broadcaster Noel Edmonds.

Chief executive Mr Dunford said: "As Van den Berg has said, we are all very much in favour of renewable energy, but it is extremely important that the truth about any turbine noise problems is made public.

"Many developers are currently proposing putting substantial groups of large turbines within 500 metres of residential areas.

"Experiences across Europe suggest that there are problems with turbine noise, and Van den Berg's recent work offers some possible explanations.

"This is important, and should be investigated further as a matter of urgency."

Further support for the new findings came from Chris Burchell, of the Lamerton Windfarm Action Group in West Devon.

He said it was not surprising that the findings from Holland had highlighted the noise nuisance that windfarms could cause.

"They give off a low frequency noise which can carry a long way," he said.

"I understand that this sort of problem has driven them bats in Wales.

"If you get two turbines you get an interconnection between the noise resonances."

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