Application Number: DCNW2008/1289/F
Name: Paul Murray
Address: Willey Lane Farm

Lower Willey
Presteigne
Powys

Tel: 01544267148

Email: p.murray@virgin.net
Date and time of comment left: 23-06-2008 09:08
Comment Type: General Observation

Comment:

The following is published here by kind permission of the authors. It outlines the problems that can occur when a wind farm is erected.

It makes compelling but disturbing reading.

EVIDENCE FOR SUBMISSION TO:

THE SELECT COMMITTEE ON ECONOMIC AFFAIRS, HOUSE OF LORDS on

THE ECONOMICS OF RENEWABLE ENERGY

- 1.0 Why we are qualified to respond to this call for evidence
- 1.1 We are Jane and Julian Davis, we farm (on a county council smallholding) in Spalding, South Lincolnshire. Julian has always farmed, in the place that is our home, and is also an agronomist. Jane is a Nurse, Midwife and Health Visitor (retired) and has been involved with mainly rural communities since 1980.
- 1.2 Our house, which we own, on our tenanted arable farm, is 930m from a wind farm, and is downwind of the prevailing wind. The wind farm, comprised of 8 wind turbines, each 100m high at blade tip with 2 MW capacity, became operational in the summer of 2006. Immediately we started having problems with the noise and hum coming from the wind turbines.
- 1.3 By May 2007 we were forced to abandon our home as a place in which to sleep and live; we currently rent a property 5 miles away so that our family can live as near a normal life as possible. Our house is now likely to have a value of just the land £35K-£50K and is no longer marketable as a home for people to live in.
- 1.4 We did not object to the wind farm in the planning stage as we had no reason to think that there would be any issues for us and we believed, at that time, that wind power was a good way of meeting the energy gap.
- 1.5 As a result of our experiences, including the fact that to date nothing has been done by anyone even to attempt to mitigate the noise issues which we suffer, we have been invited to talk to in excess of 40 communities across the UK where wind farms are proposed, and occasionally we co-present with other noise pollution victims from wind farms across the UK.
- 1.6 Some of those communities have been in touch with us to suggest, by virtue not only of our own experiences, but also as a result of enormous interaction with individuals, groups, and experts in diverse fields relating to wind farms, that we are in a unique position to submit very relevant evidence to the Select Committee. We have also presented at the International Wind turbine Noise Conference held in Lyon in 2007.
- 1.7 We now know that we suffer from aerodynamic or amplitude modulation created by the noise from the wind turbine array. The government has found it necessary to set a specific measurement for wind turbine noise (ETSU-R-97) and has publicly acknowledged that aerodynamic modulation is not fully understood by scientists. This means that no developer can categorically state that there will not be a noise problem.

- 1.8 We know that not every wind farm creates noise issues but those that do make life impossible for those who live near them. By near we mean within 1.5 miles, or $2\ km$.
- 2.0 Our Response to the Committee?s Question 2.
- What are the barriers to greater deployment of renewable energy?
- 2.1 As far as wind farms are concerned, one of the main barriers to greater deployment is the understandable negativity with which wind farms are now perceived.
- 2.2 A deluge of inappropriately and insensitively sited wind farms has resulted in huge, unprecedented communication between people across the UK which, in turn, has fostered increasing cynicism towards wind energy, if not Renewables per se.
- 2.3 The behaviour of the wind energy industry, whose tactics to succeed at any price, promotes the impression that there is something unsavoury about wind farms in the first place. Therefore, in our view, the wind energy industry has only itself to blame.
- 2.4 People generally do have a genuine concern for their environment, both locally and globally, and do appreciate the need for security of energy supply.
- 2.5 However, because these wider concerns are used tactically by the industry, they leave individuals and whole communities subsequently feeling that they have been disenfranchised. beguiled or even duped.
- 2.6 Noise, with possible consequential health effects, and flicker from the blades, combine to diminish significantly, and even eradicate, the ability to enjoy the amenity of one?s home, loss of value of the home itself, all these increasingly justifiable fears make people very worried. Increasing knowledge is demonstrating that Wind Turbine Syndrome does exist, and emerging evidence from across the world does demonstrate the devastating effects that this can have . A study into flicker and association with photosensitive epilepsy has recently been published.
- 2.7 Many people, rightly in our experience (appendix 1), are concerned that their property values will fall. Hopefully not as drastically as our now unmarketable home, but by 20% at least. Given that successive UK governments have promoted home ownership and that wind farms, in the main, are built in small rural areas and villages, this is a significant and greatly underestimated reason for people strongly resisting wind farms near their home. Existing studies, even by such eminent bodies as the RICS have been shown to be flawed in their reporting. Hansard reports some Local Authorities are already giving discretionary Council Tax reductions thus acknowledging the devaluation of some affected properties.
- 2.8 As far as our issues with noise are concerned, various investigations have been carried out. The Local Government Ombudsman has been involved. Her conclusion is that the noise planning condition (which is the same as, or similar to, every other noise condition imposed in the country for Wind Farms, based around ETSU-R-97, the so called industry standard) is ?vague, open to interpretation immeasurable and thus unenforceable?. In our case planning conditions were approved by the Planning Inspectorate, which is outside the jurisdiction of the Local Government Ombudsman, so the matter of a non specific planning condition is now being investigated by the Parliamentary Ombudsman.
- 2.9 We know that 20% of all current wind farms have some noise problems, and at the moment at least 5% of the total operational numbers cause problems that are as bad as ours.

However no-one really knows why, or appears interested in researching and finding out ways to solve an issue which clearly has the capacity to increase, if more wind turbines are built too close to homes. Because the wind energy industry cannot accurately predict if a site will experience problems with

noise, and because ${\tt ETSU-R-97}$, the guidance used by BERR for planning applications offers no protection to families, wind turbines should never be sited near homes.

- 2.10 Therefore our experiences as described in this paper show that if you have a problem, even when authorities acknowledge one exists, nothing gets done.
- 3.0 Our Response to the Committee?s Question 3. Are there likely to be technological advances that would make renewable energy cheaper and viable without Government support in the future?
- 3.1 We do not have the Scientific knowledge to be able to answer this, but based on our existing knowledge we are surprised that more work is not being undertaken to examine the viability of using geo-thermal applications (as an example, see Gresham Clacy?s work with the DTI in 1993). Wind energy is highly visible politically, whereas serious study/uptake of the geo-thermal option remains neglected.
- 4.0 Our Response to the Committee?s Question 6.

What are the external costs associated with different forms of renewable energy, such as the impact on rural areas of an increase in wind farms?

- 4.1 We have recently written to the Rural Advocate, Dr Stuart Burgess, about this very subject, with specific reference to what we see as the fragmentation of rural communities caused by an impending wind farm application. As a result of our experiences we have since early 2007 made ourselves available, at no cost, to groups in other areas who wish to obtain more information about wind turbines, and any problems associated with living near them.
- 4.2 In the past 18 months we have visited and delivered over 40 presentations. In our experience Wind Farm developers mainly target small, rural communities. We know that the industry somewhat insultingly calls these NGA?s. (Naive, Gullible and Apathetic) areas and they are prime targets. (Not, as we had naively thought, as a result of scientific research to pinpoint areas of high wind and appropriate locality, but simply areas where landowners wish to farm? wind turbines? alongside crops and livestock). Rural communities do not have the financial resources to fight inappropriate wind turbine applications. What is interpreted as apathy by developers is often a loss of morale within communities after prolonged campaigns over wind turbine applications.
- 4.3 Over this time we have become increasingly concerned not only about what we see as the fragmentation of small rural communities that is occurring, driven by some rather unpleasant tactics adopted by the wind farm developers, but also because rural communities are by their nature not strong empowered societies with effective infrastructures. We have also seen evidence of what we believe to be undemocratic practice across the UK.
- 5.0 Tactics employed by Developers. (all of which lead the ordinary citizen to become even more suspicious of and opposed to the proposed development)

Some examples:

- 5.1 Marshland St James, Norfolk there has been considerable animosity ever since the wind farm was first mooted. This has now divided the whole village. Unusually? in our experience? this is the only village where there has been criminal activity, damage to property, vandalism, arson attacks, and tragically a suicide. An internet search will give you much of the detail and the Police Officer leading the Enquiries is Inspector Paul Durham (durhamp@norfolk.pnn.police.uk) This wind farm application has not yet been submitted and all this is still happening.
- 5.2 Deeping St Nicholas, (our own village), a Wind Farm Committee was set up

to administer the so called community fund that allocates the village a small percentage of its profits (£30K initially and £10K annually). A complaint has already been made to the Parish Council about how this money is administered. My observation is that small communities (those with less than 2,000 residents) are often used to raising money for church fabric, community halls, for specific purposes and specific groups - but do not have the infrastructure in place to be able to easily administer unearned money with no specific target. Much unease and unrest has been caused, most of it between those who see themselves as ? locals? and those who are perceived as ?incomers?. The gift of money with no identified purpose seems to cause more disagreement than the raising of money for a specific entity.

5.3 Long Benington, Lincolnshire

The aspiring developers, Infinergy, sent the attached document ?Infinergy? to all members of the Development Control committee before a planning application decision was discussed.

We can confirm, on oath if needs be, that we have in our possession evidence and proof from South Holland District Council that all the statements within that document are flawed and based on false information and unrepresentative data. The monitoring of noise levels referred to was carried out by the local Council over 27 hours during the month of October 2007. That month turned out to have seen the lowest wind speed across the UK, and thus the turbines were only operating at an unrepresentative 11% during the month. (on average, they usually operate at 25%). These facts would have been known to the Wind Farm Developers when they persuaded South Holland District Council to issue the statement that provides the basis of the ?Wind Prospect Statement on Deeping St Nicholas? (see attached document). Despite evidence that this data is inaccurate, there has been no action to rescind the statement?s inaccuracies by the BWEA, which is still using this material.

5.4 Glyndebourne, Ringmer Sussex.

A version of the Wind Prospect statement was sent out by the BWEA. [See sec 5.3]. This was submitted as a ?Proof of Evidence? by the Acousticians acting for the Developers at the Glyndebourne Inquiry. South Holland District Council issued a rebuttal in part to the Inquiry

5.5 Tynedale Public Inquiry, still in progress, Northumberland..

BWEA statement [see sec 5.3] submitted as a ?Proof of Evidence? by Acousticians acting for the Developers. Mr. & Mrs J Davis will be rebutting this, with evidence, at the Inquiry, in person.

5.6 Old Hutton Wind Farm Application. (Banks Development) (South Lakeland District Council)

Banks Development offered, and the Local Tennis Club have accepted in writing, a sum of money (believed to be about £19,000). Three of the members of the Tennis Club are also on the Local Parish Council who had not yet met to consider the Wind Farm proposal. When the Parish Council did meet later to discuss and consider the planning application for the wind farm, those members had to declare their interest and thus the Parish Council was left not quorate so that matter could not be acted upon. The villagers, therefore, were effectively robbed of their rights to put forward a view, whatever those views might have been.

5.7 Mountboy site, Rossie Moor, Angus, Yelland, Isle of Wight, Berwick, (Toft Hill) and many others.

Activists, brought in from elsewhere by the Developers, set up stalls in local markets and even outside schools to canvas opinion as to whether people support renewable energy, and wind power in general. That response was then taken, and the figures used, to signify support for their specific scheme. As one would

expect, many people were concerned and supported a broad renewable strategy, but did not expect their support to be submitted to planning authorities as support for a specific wind farm, which is quite a different thing altogether. Sometimes children were encouraged to sign such cards. A similar tactic is employed when consultations are sent out within Parishes. Those who do not respond to the so-called consultation are counted as being ?broadly in favour? as they did not actively respond to indicate they don?t want the wind farm.

- 5.8 ?Community Funds? (Bribery.) These ?funds? often come with a caveat that suggests they will be paid only if there is no significant opposition to the wind farm. These ?funds? represent a minute fraction of the profits earned by developers, yet are very tempting to communities.
- 5.9 Photomontages. The photomontages used by developers often misrepresent the true scale and impact of the development. For example, photomontages have been criticised for presenting panoramic views, often taken in weather conditions which further diminish the actual visual impact (this includes the infrastructure of the wind farm as well as the wind turbines themselves). This kind of misinformation, deliberately designed to misguide the public and planning officials alike, has done much to foster cynicism, frustration and fury within local communities.
- 5.10 Planning Regulations. Decentralised planning conditions mean that there are geographical areas that have numerous wind farms because planning is undertaken without consistency or coordination and without any real understanding of the enormity of the cumulative impact; this can be seen in areas like Cumbria, the Lune valley, Wales, and Norfolk.
- 5.11 Time and money. We are quite sure that the Government has no concept of the immense amount of time, money and emotional energy expended by villagers, in the vicinity of each inappropriate application. People are trying not only to protect the visual amenity of the area in which they live, but also not to lose the very thing which they have spent their lives working and saving for, notably an environment that promotes the health and well-being of families, as well as the peace, tranquillity and amenity of their homes and gardens.

In our experience, each anti-wind turbine campaign (or ?pro community and local environment campaign?), costs villages about £100,000 in real terms. If the matter goes to a public inquiry, then this amount can be tripled. This tremendous unseen cost represents the loss of important resources to local government and the communities. Moreover, these processes and inquiries also breed significant distrust, dislike, and disbelief in those who set our planning policies, as many appear to accept as de facto the reports produced by the wind turbine developers to support their applications, without further investigation or independent analyses.

- 5.12 Emotional Distress. One current wind farm application in Devon affects two local smallholding farmers with young families who had bought a small amount of land from a neighbouring farmer and built log cabins for the tourist industry. The farmer from whom they purchased the land has now applied for a wind farm to be built behind the cabins, some 400m away. This has understandably upset many people in the area. The emotional distress experienced by these families is, we understand, mirrored in cases up and down the country.
- 5.13 Public Inquiries for turbine applications can last for weeks, if not months, the current so called Tynedale Inquiry being a case in point. The developers persist because there is so much profit to be made with ROC?s. They employ barristers and their legal teams, in addition to an array of planning consultants, often for extended periods. Local authorities and campaign groups struggle to represent local concerns and protect community well-being, even though financial resources are stretched and strained to accommodate this process. Such unequal financial burdens may already be affecting the ability of many councils to address such responsibilities. Many will be unable to fund proper defence of decisions through the Appeal Courts.

5.14 Security of Supply. There are two kinds of power, base load, and reserve (or back up).

Wind turbines cannot be used as base load production as wind generated electricity is not reliable or predictable enough to allow this.

- 5.15 Jobs. Developers often use the phrase ?local employment may be created during construction, boosting the local economy?. In our experience ?may? is usually a may NOT, unless you count temporary short-term local contracts for sand and gravel. The more complex engineering, electrical and construction works are put out to local tender, and then aspiring contractors are told ? ?? sorry, ? you do not have the appropriate expertise? after which the services, components and workers are brought in from 3rd party suppliers almost always outside the UK, e.g. Vesta, Nordex, Re-Power , Hanssen Transmissions, Suzlon, GE etc.
- 5.16 BWEA. The role of the BWEA is misunderstood, as many members of the public believe that it is an independent organisation set up to give accurate factual information about wind power. In fact, BWEA is the trade and professional body for the UK onshore and offshore wind energy industries. In our experience it does not always present accurate information, as the ASA has pointed out on several occasions. For example, ASA said that BWEA had misrepresented CO2 ? savings?, Closer to home as already mentioned in our case, BWEA has yet to correct the misinformation that it has put out about us.. BWEA has included this misinformation in summaries submitted to Public Inquiries as part of ? Proofs of Evidence?. Thus, it seems that the role of the BWEA is to present misinformation that benefits the industry.
- 5.17 Noise and the Nature of Noise. Our own experience and research suggests that the intrusive nature and the volume, depth, breadth and intensity of the noise are not yet fully understood. We find it very interesting that across the world people, such as ourselves, who suffer intensely from the noise use the same phrases to describe it. Phrases such as ?a toy in a tumble dryer?, ?a train that never arrives? ?a thumping heartbeat?, ?someone blowing in your ears?, ?2 or 3 helicopters flying above my house?, ?a low-pitched, penetrating non-directional hum?, are used by sufferers in Canada, the USA, New Zealand, Italy, Ireland, Scotland, Wales, and other countries. These people usually experience the problem before realising there are others who have already been exposed. Yet developers still promise that noise will not be an issue.
- 5.17 A A reasonable man may question why it is necessary to hold an ?International Wind Turbine Noise Conference? every two years, outside the UK, with 24 countries attending over 2.5 days if, as the BWEA would contend, Wind Turbines are not noisy.
- 5.17B What the Wind Turbine Noise Does? Wind turbine noise is characterised by its loudness, pulsating character, low frequency component, and its continuous nature (often 24/7), which combine to affect:
- ? Sleep
- ? Rest.
- ? The ability to enjoy the amenity that is your home (or was)
- ? Health issues.
- ? Loss of value to home
- ? Concentration making using complex equipment potentially dangerous
- ? Impaired cognitive ability
- ? Social lives, e.g. it was no longer possible for our daughter to have ? sleep-overs?
- ? Mood changes and constant tiredness which leads to increased irritability, feelings of despair, and feelings of inability to cope with normal day to day activities.
- . Tiredness means that you become more prone to accidents, not ideal in any circumstance but dangerous on a farm. The peculiar noises that the wind turbines emit cannot only be heard, they can also be felt by the body, and thus trying to rest becomes impossible. We tried: fans, white noise machines, sleeping tablets, red wine and ear plugs. The latter mask background noises but

allow the low frequency sound wave to penetrate so that it feels part of your body. Meanwhile the beat, the pulsation, that is slightly faster than our human hearts beat, means that you feel as if you are constantly trying to get your heart to catch up with this external rhythm that is felt by the body rather than heard, so rest is impossible. The problem with the noises from the wind turbines is that they are so unpredictable, and the noise draws your attention and completely distracts you.

- 5.18 Safety Issues There are an ever increasing number of reports about turbine blades
- breaking or fracturing and being thrown considerable distances, also some fires, ice ?throws? and a small number of deaths in the construction phases. People find these worrying and concerning, particularly when homes are being built nearer to turbines in the UK than anywhere else in Europe.
- 5.19 Wildlife Issues. There are reports of raptors and bats being killed by turbines. Our moles have gone as they cannot tolerate the vibrations and there are ongoing studies into the effects on essential fungi and invertebrates at the bottom of the food chain, which only live in still conditions.
- 5.20 Changing Specifications. Developers seem to change specifications of the wind turbines or the siting of the turbines after planning permissions have been granted with no further amendments or applications, to the detriment of the visual impact, and more worrying, to the audible effects on the health and wellbeing of those living near the wind turbines. For example, the wind turbines proposed for Deeping St Nicholas initially had a tower height of 67 metres and a rotor diameter of 66 metres. In September 2004, 15 months after the Planning Appeal Decision, Wind Prospect said they wished to change the turbines to RE Power MM82's with a Tower height of 59m and a rotor diameter of 82m. The rotor blades are thus nearly 25% longer, with a corresponding increase in noise, but no further application, measurements or amendments were undertaken that we can ascertain.
- 5.21 Community ownership. Companies such as Energy4all are set up to promote so-called community ownership within a co-operative set up. The most recent to come on line were two turbines at Deeping St Nicholas, the same site that has driven us out of our home. The Financial Services Authority complained about the proposal and the Company had to issue a supplementary prospectus correcting many areas of misinformation.
- 5.22 Local Councils. Local councils do not have the time, equipment or expertise to measure the specific noise standard applied to wind farms. Therefore, they rely on the wind industry?s measurements, documentation, and analyses. The councils also have to rely on the operating company releasing wind and operating conditions in order to be able to accurately measure the noise emissions. Councils have no legal powers to insist on a shut down for measurements of background noise to take place. Hence the Ombudsman?s conclusion (see paragraph 2.8) DEFRA has recently also put out a research proposal to address this very issue.

6.0 Summary

We hope that we have been able to impress upon you why we are so concerned about the behaviour and actions of the Developers of industrial wind turbine sites. However, we are also concerned about the long term impact on fragile rural communities and their futures, particularly when local voices are ignored and the health and well-being of communities, families, and the local environment are sacrificed for financial and political expediency.

Julian Davis BSc & Jane Davis M.A. RN June 6th 2008. This is our own evidence.

Home Address: The Farmhouse, Grays Farm, North Drove Bank, Spalding, Lincs. PE11 3JX

Residential Address: 10, Mayfair Drive, Spalding, Lincs, PE11 2UG

Tel: 01775 714515; email sburles@waitrose.com

APPENDIX 1

Property Values and House Prices

These pages contain letters from Estate Agents relating to difficulties with the selling and marketing of some properties near some windfarms.

With the exception of the first, letters are sourced from $\ensuremath{\mathsf{www.countryguardian.net}}$

The Letter from Russell & Munton is our own, and relates to our own home.

The letters are dated over a 10 year period.

STATEMENTS FROM OTHER NOISE AND FLICKER VICTIMS

DEMONSTRATING THAT THIS IS NOT A RARE OCCURRENCE LIMITED TO THOSE WITH POVER SENSITIVE HEARING?

AND

IS A WORLD-WIDE PROBLEM EXACERBATED IN THE UK BY THE EVER INCREASING PROXIMITY OF WIND TURBINES TO HOMES AND OTHER INSTITUTIONS eg SCHOOLS, NURSING HOMES etc.

The following Log is our own and is taken from an Excel Spreadsheet Log that we kept.

It documents our issues.

Pulse Hum 1					
Yes Yes 26/06/2006 05.00 - 07.00 and 22.00 - 24.00 11.5 revolutions per min and grinding/rumble heard at night Yes					
1 26/06/2006 05.00 - 07.00 and 22.00 - 24.00 11.5 revolutions per min and grinding/rumble heard at night Yes Yes Yes 3 1 27/06/2006 22.00-24.00 grinding/rumble heard at night Yes Yes Yes Yes 4 1 28/06/2006 04.00 to 07.00 & 20.00 to 24.00 Very loud Yes Yes Yes 5 1 29/06/2006 04.00 to 07.00 & 17.00 to 24.00 Very loud Yes Yes Yes 6 1 30/06/2006 04.00 to 08.00 & 17.00 to 24.00 Very loud Yes Yes Yes 7 1 01/07/2006 16.00 -17.00 Then we were out for rest of night Yes Yes Yes 8 1 02/07/2006 17.00 - 24.00 "Tried to have a BBQ and had to go inside due to noise and vibration - felt by guests also. Difficult to get to sleep. Wind SSE, SSW" Yes Yes Yes 9 0 03/07/2006					
min and grinding/rumble heard at night Yes Yes Yes 3					
1 27/06/2006 22.00-24.00 grinding/rumble heard at night Yes Yes Yes Yes 4 1 28/06/2006 04.00 to 07.00 & 20.00 to 24.00 Very loud Yes Yes Yes Yes 5 1 29/06/2006 04.00 to 07.00 & 17.00 to 24.00 Very loud Yes Yes Yes Yes 6 1 30/06/2006 04.00 to 08.00 & 17.00 to 24.00 Very loud Yes Yes Yes Yes 7 1 01/07/2006 16.00 -17.00 Then we were out for rest of night Yes Yes Yes Yes Yes 8 1 02/07/2006 17.00 - 24.00 "Tried to have a BBQ and had to go inside due to noise and vibration - felt by guests also Difficult to get to sleep. Wind SSE, SSW" Yes Yes Yes 9 0 03/07/2006					
Yes 4					
4 1 28/06/2006 04.00 to 07.00 & 20.00 to 24.00 Very loud Yes Yes Yes 5 1 29/06/2006 04.00 to 07.00 & 17.00 to 24.00 Very loud Yes Yes Yes 6 1 30/06/2006 04.00 to 08.00 & 17.00 to 24.00 Very loud Yes Yes Yes 7 1 01/07/2006 16.00 -17.00 Then we were out for rest of night Yes Yes Yes 8 1 02/07/2006 17.00 - 24.00 "Tried to have a BBQ and had to go inside due to noise and vibration - felt by guests also Difficult to get to sleep. Wind SSE, SSW" Yes Yes Yes 9 0 03/07/2006					
Yes 1					
5					
Yes 6					
6 1 30/06/2006 04.00 to 08.00 & 17.00 to 24.00 Very loud Yes Yes Yes Yes 7 1 01/07/2006 16.00 -17.00 Then we were out for rest of night Yes Yes Yes 8 1 02/07/2006 17.00 - 24.00 "Tried to have a BBQ and had to go inside due to noise and vibration - felt by guests also Difficult to get to sleep. Wind SSE, SSW" Yes Yes Yes 9 0 03/07/2006					
Yes 7					
7 1 01/07/2006 16.00 -17.00 Then we were out for rest of night Yes Yes Yes 8 1 02/07/2006 17.00 - 24.00 "Tried to have a BBQ and had to go inside due to noise and vibration - felt by guests also Difficult to get to sleep. Wind SSE, SSW" Yes Yes 9 0 03/07/2006					
Yes Yes 8 1 02/07/2006 17.00 - 24.00 "Tried to have a BBQ and had to go inside due to noise and vibration - felt by guests also Difficult to get to sleep. Wind SSE, SSW" Yes Yes 9 0 03/07/2006					
8 1 $02/07/2006$ 17.00 - 24.00 "Tried to have a BBQ and had to go inside due to noise and vibration - felt by guests also Difficult to get to sleep. Wind SSE, SSW" Yes Yes Yes 9 0 $03/07/2006$					
inside due to noise and vibration - felt by guests also Difficult to get to sleep. Wind SSE, SSW" Yes Yes Yes 9 0 03/07/2006					
sleep. Wind SSE, SSW" Yes Yes 9 0 03/07/2006					
9 0 03/07/2006					
10 1 04/07/2006 19.00 to 24.00 Loud vibration/num disturbed sleep Yes					
77 - 77 -					
Yes Yes					
11 1 $05/07/2006$ 12 1 $06/07/2006$ 19.15 - 24.00 Hum returns as No. 5 turbine is					
switched on - had been off most of day Yes Yes Yes 13 07/07/2006					
13 07/07/2006 14 1 08/07/2006 05.30 - 08.30 Left to go on holiday (did NOT need to					
wake up at 5 am!!) Yes Yes Yes					
15 0 09/07/2006 Holiday - Away					
16 0 10/07/2006 Holiday - Away					
17 0 11/07/2006 Holiday Away					
18 0 12/07/2006 Holiday Away					

```
19
     0
           13/07/2006
                             Holiday - Away
20
     0
           14/07/2006
                             Holiday - Away
                             Holiday - Away
21
     0
           15/07/2006
22
     0
           16/07/2006
                             Holiday - Away
           17/07/2006
23
     0
                             Holiday - Away
24
     0
           18/07/2006
                             Holiday - Away
25
     0
           19/07/2006
                             Holiday - Away
26
     \cap
           20/07/2006
                             Holiday - Away
27
     Λ
           21/07/2006
                             "Holiday - Away, throughout holiday all of us
slept till at least 9 am. No headaches, or earaches whilst away. Turbines off
when we returned home."
           22/07/2006 04.37 - 07.30
                                         "Woken at 04.37, ears pulsing, whoosh,
     1
throb and house humming. I cried." Yes Yes
                                              Yes
           23/07/2006
                             Slept till 08.30 and 09.17 respectively. No noise
30
           24/07/2006
31
           25/07/2006 19.00 - 23.00
                                        Too loud to sit comfortably in garden.
     Yes
           Yes
                Yes
32
           26/07/2006
33
           27/07/2006
           28/07/2006
34
           29/07/2006 19.30 - 23.00
                                        Could be heard over combines! Yes
35
     1
                                                                            Yes
     Yes
           30/07/2006 19.30 - 23.01
                                        Could be heard over combines! Yes
36
     1
                                                                            Yes
     Yes
37
     1
           31/07/2006 20.00 - 24.15
                                        heard over rainstorm and very
                           Yes
intrusive afterwards
                       Yes
                                  Yes
           01/08/2006 04.37 -
                                   "woken by house humming and ears pulsing.
     1
Wind from SW, fast and noisy."
                                  Yes
                                         Yes
                                              Yes
                      06.00 - 23.00
          02/08/2006
                                         Hum noticeable early morning and
evening particularly
                                   Yes
           03/08/2006
                       06.00 - 23.00
                                         Hum noticeable early morning and
     1
evening particularly
                                   Yes
                       06.00 - 23.00
                                         Hum noticeable early morning and
    1
          04/08/2006
evening particularly
                                   Yes
                       06.00 - 23.00
                                         Hum noticeable early morning and
    1
          05/08/2006
evening particularly
                                   Yes
        06/08/2006
                       06.00 - 23.00
                                         Hum noticeable early morning and
evening particularly
    1
        07/08/2006
                       06.00 - 23.00
                                         Hum noticeable early morning and
evening particularly
                                   Yes
    1
          08/08/2006
                       06.00 - 23.00
                                         Hum noticeable early morning and
evening particularly
                                   Yes
    1
          09/08/2006
                       06.00 - 23.00
                                         Hum noticeable early morning and
evening particularly
                                   Yes
    1
          10/08/2006
                       06.00 - 23.00
                                         Hum noticeable early morning and
evening particularly
                                   Yes
                       06.00 - 23.00
    1
          11/08/2006
                                         Hum noticeable early morning and
evening particularly
                                   Yes
    1
          12/08/2006
                       06.00 - 23.00
                                         Hum noticeable early morning and
evening particularly
                                   Yes
          13/08/2006
                       06.00 - 23.00
                                         Hum noticeable early morning and
    1
evening particularly
                                   Yes
                       06.00 - 23.00
                                         Hum noticeable early morning and
           14/08/2006
    1
evening particularly
                                   Yes
                       06.00 - 23.00
                                         Hum noticeable early morning and
    1
           15/08/2006
evening particularly
                                   Yes
                                         Hum noticeable early morning and
                       06.00 - 23.00
    1
           16/08/2006
evening particularly
                                   Yes
    1
           17/08/2006
                       06.00 - 23.00
                                         Hum noticeable early morning and
evening particularly
    1
           18/08/2006
                      06.00 - 23.00
                                         Hum noticeable early morning and
evening particularly
           19/08/2006 06.00 - 23.00
                                         "Hum noticeable early morning and
```

```
evening particularly, whoosh present as well" Yes
                                                          Yes
57 1
           20/08/2006 06.00 - 23.00
                                         Hum noticeable early morning and
evening particularly
                                   Yes
    1
           21/08/2006 06.00 - 23.00
                                         Hum noticeable early morning and
evening particularly
                                   Yes
   1
           22/08/2006 06.00 - 23.00
                                         Hum Very noticeable early morning and
evening particularly
                                   Yes
   1
           23/08/2006 06.00 - 23.00
                                         Hum Very noticeable early morning and
evening particularly
                                   Yes
61 1
           24/08/2006 06.00 - 23.00
                                         Hum Very noticeable early morning and
evening particularly
                                   Yes
62 1
           25/08/2006 06.00 - 23.00
                                         Hum Very noticeable early morning and
evening particularly
                                   Yes
           26/08/2006 06.00 - 23.00
63 1
                                         Hum Very noticeable early morning and
evening particularly and whoosh
                                   Yes
64 1
          27/08/2006 06.00 - 23.00
                                         Hum Very noticeable early morning and
evening particularly
                                   Yes
65 1
           28/08/2006 06.00 - 23.00
                                         Hum Very noticeable early morning and
evening particularly
                                   Yes
           29/08/2006 06.00 - 23.00
                                         Hum Very noticeable early morning and
evening particularly
                                   Yes
           30/08/2006 06.00 - 23.00
                                         Hum Very noticeable early morning and
evening particularly
                                   Yes
           31/08/2006 06.00 - 23.00
                                        Hum Very noticeable early morning and
evening then joined tonight by very loud acoustic noises of the whoosh and
          Yes Yes
                      Yes
           01/09/2006 04.44 woken by house humming and ears pulsing. Turbines
whooshing and thumping fast and noisy. Yes Yes Yes
          02/09/2006 04.38 woken by house humming and ears pulsing. Turbines
whooshing and thumping fast and noisy. Eventually got back to sleep by putting fan on facing wall. Yes Yes Yes
          03/09/2006 13.00 - 23.00
                                         Away night of 02/09/06 Hum noticeable
on return on 03/09/06 evening particularly
                                                          Yes
          04/09/2006 06.00 - 22.00
                                        Hum Very noticeable early morning and
evening particularly
                                   Yes
          05/09/2006 04.00- 07.00
                                         "Whoosh back - not loud but insidious
73 1
plus hum, disturbed sleep" Yes
                                         Yes
         06/09/2006 04.47 woken by house humming and ears pulsing. Turbines
whooshing and thumping fast and noisy. Eventually got back to sleep by putting fan on facing wall. Yes Yes Yes
           07/09/2006 05.35 -23.00
                                         "Hum very loud and ""rattly"""
           Yes
           08/09/2006 02.00 - 24.00
                                        "Woke at 02.00 to go to the toilet,
still awake at 03.43. Hum more of a noisy grinding in the background than a hum,
and not easy to get back to sleep. Hum and whoosh very noticeable at midnight
when we had visitors!" yes Ye
77 1 09/09/2006 04.44 - 23.00
                                  Yes
                                        Woke briefly and could hear hum but
went back to sleep as had taken sleeping tablets
                                                                yes
    1
          10/09/2006 07.40 - 24.00 Hum noticeable but slept through with
the help of sleeping tablets. Thick mist this morning but hum still noticeable.
Turbines very noisy at bedtime - all nacelles pointing our way. Yes Yes
           11/09/2006 04.44 - 23.30 "Nacelles all pointing our way, so
very noisy through the night. Nacelles VERY noisy in the day as well creating
the horrible harmonic in the farm yard. All residents affected in both houses."
     Yes Yes
                 Yes
           12/09/2006 04.40 - 23.00
                                         "Nacelles all pointing our way, so
80
very noisy through the night. Tried to have a lie in and watch television in the
bedroom - totally impossible due to flicker - nacelles pointing directly at us."
     Yes Yes
                Yes
           13/09/2006 04.40; 06.40; - 23.00 "Nacelles all pointing our way,
so very noisy through the night. Eventually went to sleep with a prescription
sleeping tablet and the fan on. Woke briefly at 04.40 as turbine noise
distinguishable above fan, but went back to sleep again. Woke properly at
```

06.40, turbines whooshing and grinding noise apparent as well as hum. Later in

- the day/evening turbine noise much reduced, only to pick up at 22.00 again!" Yes

 Yes Yes with grinding too.
- 82 1 14/09/2006 06.40 Turbines noisy early morning and quite distracting. Hum also evident Yes Yes
- 83 1 15/09/2006 06.50 Turbines noisy early morning and quite distracting. Hum also evident Yes
- 1 16/09/2006 "02.10; 03.30; 04.32; 05.10, 06.30 24.00" "Windy night but hum very noticeable. Has elements of a distant engine rattling noise in it. All electricity turned off in house but hum/whine still very noticeable. Went outside and turbines going faster than normal clockwise. Hum also evident in buildings and whoosh/thump evident when outside. Had my first study day of a new diploma course, but so tired I was unable to concentrate. Over tired going to bed and eventually had to take two sleeping tablets one at 9 p.m. and one at midnight, and sleep with the fan on. Julian needed to cultivate but fell asleep for three hours after lunch, he too needed sleeping tablets, the fan and earplugs to try and sleep."
- 85 1 17/09/2006 "03.30 and 04.35 and 6.30 onwards, still apparent at 23.00" "The hum/whine/drone seems incessant. We are so tired today that the simplest things, following a recipe, assembling a cupboard seem impossible. Everyone very tired and totally exhausted. This is not living anymore."

 Yes with grinding too.
- 86 1 18/09/2006 "01.10, and 05.11" Again the hum/drone/whine seems incessant and almost impossible to override with anything. Whooshing and thumping late at night 23.00 Yes Yes Yes
- 87 1 19/09/2006 06.00 23.00 Hum Very noticeable early morning and evening particularly Yes Yes
- 88 1 20/09/2006 17.00 24.00 "Quite a windy day, turbine whoosh started to become noticeable over wind at 5 p.m.. By 10 p.m. we had the harmonic effect back with us. Imagine trying to sleep with a washing machine on a fast spin, intermittently! "Yes Yes Yes
- 89 1 21/09/2006 00.00 24.00 Washing machine fast spin harmonic on full pelt. Noise unbelievable. Estimated at 55 DB (A). Can be heard over television! Yes Yes Yes
- 90 1 22/09/2006 06.00 23.00 Hum noticeable early morning and evening particularly Yes
- 91 1 23/09/2006 06.00 23.00 Hum noticeable early morning and evening particularly Yes
- 92 1 24/09/2006 06.00 23.00 Hum noticeable early morning and evening particularly. Very quiet late at night so turbines easily heard and intrusive Yes Yes Yes
- 93 1 25/09/2006 06.00 23.00 Hum noticeable early morning and evening particularly. Windy Day generally Yes
- 94 1 26/09/2006 Hum noticeable early morning and evening particularly. Windy Day generally Yes
- 95 1 27/09/2006 "Hum noticeable early morning and evening particularly. Whoosh very very intrusive in early evening, rained later but
- noise still evident over rain and wind" Yes Yes
 96 1 28/09/2006 06.30 -23.00 "Hum noticeable early morning and evening particularly. Windy Day generally, but turbines noisy going to bed, sleeping tablet required." Yes Yes
- 97 1 29/09/2006 "04.30, 06.30" "Woke to whoosh, whoosh but went back to sleep (sleeping tablet). Turbines whooshing well, and hum distinctly obvious. We had our yearly very late night ball tonight. Both so tired that at 10.30 we were yawning and desperate for bed?. This is a much looked forward to event that goes on till 3 am, which is never normally a problem but tonight it was ruined for us by our sheer exhaustion. We stayed in a Travelodge right on the busy Helpringham roundabout and slept soundly till 07.20. No hum there!" Yes
- 98 1 30/09/2006 13.00 22.30 Did not get home till 1pm. Windy day so any noise from turbines as in whoosh was masked. Dreaded hum still very apparent though Yes
- 99 1 01/10/2006 06.45 -24.00 "It would be really helpful to know what was happening last night, Sat 30th from about 5 p.m. until 1 am.
 - Yes Yes Particularly between 9.30pm and 11.30 when we were

```
trying to get to sleep......The whoosh was very loud, insistent and at less than
2s intervals. The thump was also very audible. The noise was clearly audible
over the television and over the thunder"
100 1 02/10/2006 "00.00 - 01.00, 06.30 - 22.30" Whoosh and thump
heard until 1 am (when we were last awake) Hum noticeable early morning and
evening particularly Yes Yes Yes
101 1
           03/10/2006
                           Hum always seems much louder when wind is fast and
from the north. And it's tone changes too Yes
          04/10/2006 Recovered Data: Hum always seems much louder when
102 1
wind is fast and from the north. And it's tone changes too
103 1
          05/10/2006 Recovered Data: Hum always seems much louder when
wind is fast and from the north. And it's tone changes too
          06/10/2006 03.20; 05.20 "Recovered Data: Woke up to the
104 1
whoosh, and thump, so we guess the wind has suddenly changed"
                                                                        Yes
105 1 07/10/2006
                          Computer lost data
106 1
          08/10/2006
                           Computer lost data
          09/10/2006 Odd thing today wind from north/north west and
107 1
about 6pm it was obvious that 1 turbine was interfering with two.
          10/10/2006
                          Lightening strike blew up nearby transformer so we
had no electric for 17 hours. Hum still present though and very noticeable in
the quiet.
                      Yes
109 1 11/10/2006
                                            Yes
         12/10/2006
                          Hum very loud - particularly at 11pm. Monitoring
110 1
equipment in today.
                                Yes
          13/10/2006 4:30 Woke early. Stayed awake. Hum penetratingly loud
                Yes
           14/10/2006 "04.00, 07.00 - 24.00" Very foggy morning. Hum very
noticeable by guests sleeping in house who found themselves woken up by it.
           Yes
                          We slept at other end of the windfarm last night
          15/10/2006
and slept all night without waking up at all and no hum detectable either.
Bliss!
                     Yes
                           "Very foggy and hum very noticeable, woke several
114 1
          16/10/2006
times in night. "
                           Yes
115 1 17/10/2006
                           "Whoosh and thump have returned?not to the levels
that they were when really bad in the summer, but still easily detectable Hum
extremely loud. "Yes Yes Yes 116 1 18/10/2006 Hum very noticeable again today.
          19/10/2006 "03.30, 04.30, 06.00" The whoosh is back! Again not to
    1
117
the levels that we had in the summer but enough to wake you up thoroughly. All
day today we have had what we believe to be AERODYNAMIC MODULATION. Particularly
late afternoon and all evening. The so-called harmonic has also been present and
the whoosh has been clearly audible indoors as well as out. the hum is louder
than normal as well. Yes Yes Yes
118 1 20/10/2006 "00.58, 04.24"
                                      Woken up by the whoosh effect twice.
Didn't get back to sleep after 4 am which wasn't good as I had a study day in
London. Totally exhausted. Noise intolerable at times. Hum also very noticeable
as is the grinding noise. Yes Yes Yes
119 1 21/10/2006 5:45 "woken by the whoosh, some blade noise
distinguishable in yard." Yes
120 1 22/10/2006
                           "Hum very loud and penetrating, occasionally
masked by loud winds outside - but not often enough."Yes Yes
        23/10/2006 4.28 am "Woken by the whoosh and thump, couldn't go
back to sleep. Terribly tired. Decided to go away for the night." Yes Yes
           24/10/2006 17:00 "Away last night, in a hotel by a road. Slept all
night till 07.20. BLISS! On return Turbines audible as a whoosh. Hum ever
present." Yes
                Yes
123 1 25/10/2006 Hum all the time "slept with sleeping tablet. Some
blade noise, Hum persistent, WD40 noise also apparent." Yes Yes
124 1 26/10/2006 Hum all the time "slept with sleeping tablet. Some
blade noise, Hum persistent, WD40 noise also apparent." Yes Yes
```

27/10/2006 Hum all the time "Slept last night with sleeping

1

```
tablet. A different whoosh noise today - more of a swish, wind from north or
west, hum as always noticeable and wd40 noise apparent too." Yes
                                                                     Yes Yes
           28/10/2006 Hum all the time "Jane slept away last night and slept
till 08.40 straight through! Hum not as discernible at home, but turbines easily
audible by Julian."
                       Yes
                                   Yes
            29/10/2006 Hum all the time. AM in evening. "Julian and Jane
127
slept out last night! Oh Yes! And slept all night till 08.45! No hum in our
friends house, which is on a busy road and we slept with the windows open and
the traffic didn't bother us either! At 22.00 tonight we had the closest we have
had to the awful noise in the summer that we now know to be aerodynamic
modulation. Closest in terms of volume, level, and synchronisation of the
turbines. Averages and Leq's at 50+ dB(A). Actuals were 62 at one point."
      Yes
           Yes
128
            30/10/2006
                             "Amazingly good day. Wind was causing all turbines
     1
to operate independently, running across the farm rather than along it. Some
swish audible but not intrusive and the wind noise more or less drowned the hum
                 Yes
129 1
            31/10/2006
                             Last night we slept all night!!!!!!!!!! Woke to
slight WD40 sound and some hum but not till 06.30! 2.30 pm Turbines whooshing
very very loudly again - wind direction southerly and the racket is back -
clearly audible over quite a loud wind noise. Yes
                                                   Yes Yes
           01/11/2006
                          "Very difficult getting to sleep last night hum
and WD40 noise very penetrative and distracting. Occasional swish heard also.
Took sleeping tablet at 00.38 and woke at 6.20 am?Went to see Dennis & Cilla at
Pepper Hill farm who asked what progress was being made - they hear occasional
whoosh BUT they can also hear the harmonic when it occurs as well! They describe
it as like a train coming towards them that never arrives and is worrying,
distracting and penetrating." Yes Yes Yes

131 1 02/11/2006 Woke up with headache - all of us! North wind and
wd40 and hum apparent. Decamped at 7.20 pm to sleep out overnight?..
      Yes
                             Slept brilliantly woke at 6.30 and was able to
132
            03/11/2006
      1
snuggle down and go back to sleep again for an hour. Returned home to hum at
09.00 ish. Decamped at 10pm to sleep out overnight again?.
                            Slept ALL night. Woke at 07.20 feeling better than
           04/11/2006
we have done for ages! No hum in that house! Back home in day - Left again at
18.00 to sleep out again
                                         Yes
          05/11/2006 15.18 ?.. Slept ALL night. Woke at 08.20 feeling
fantastic! Back home hum still present and at 3.18 pm it seemed as if the
turbines were modulating again - but wind direction almost perpendicular to the
turbines and whoosh very distinct and can be heard over potato lifter and
television.
                 Yes
                             Yes
                             "Slept at home last night - hum very apparent,
    1
           06/11/2006
woke at 04.30 to hum"
                                   Yes
136
     1
           07/11/2006
                             Slept out and slept all night - bliss
      Yes
           08/11/2006 04.30 am "Slept at home last night - hum very
apparent, woke at 04.30 to hum. NB there will some odd episodes of modulation at
2.20 to 2.45 \mathrm{pm} - they are a demonstration CD that we were using for a visitor."
                 Yes
138
      1
            09/11/2006
                             slept out last night but left all fridges etc on
                 Yes
139
      1
            10/11/2006
                             slept out last night but left all fridges etc on
                 Yes
           11/11/2006
                             "Slept at home last night - woke at 5 am, and
      1
couldn't go back to sleep - hum distinct."
                            slept out last night but left all fridges etc on
           12/11/2006
141
    1
                 Yes
           13/11/2006 4.29 am
                                   "Woke at 4 am to swish, swish and audible
142
WD40 noise - didn't get up to push switch, and went back to sleep about 5 am.
WD40 and swish audible 7 am onwards."
143 1
          14/11/2006
                            slept out last night but left all fridges etc on
                 Yes
144
           15/11/2006
                            "It was probably a very bad idea to sleep out so
```

```
much lately. Last night was hell again. Difficult to get to sleep with WD40, hum
and AM and whoosh all very apparent, woke at 5.30 am to whoosh, thud, wd40 and
hum. Got up. And put the television on - another mistake as flicker was very
apparent on the upstairs television in our room and made us feel sick. (NB
Dishwasher went on at 5.00 am by mistake - should have been 6.00). so back to 5
hours sleep and hence feeling awful again. Incredibly noisy this pm - seven
onwards - so we left home - again. Not sure what's happening as its
dark ..... Yes Yes Yes
145 1 16/11/2006
                            Slept out last night.
          17/11/2006
                           Slept out last night. Comment today was how much
better and less drawn and tired we looked!
                                                         Yes
147 1 18/11/2006
                            "Came home at 2.30 am following a ball - AM in
full swing - whoosh, WD40 and hum all very apparent - so still awake at 04.00!!!
This is terrible? Even guests complain their ears feel as if they are being
tickled/irritated"
                     Yes Yes Yes
           19/11/2006 3.16 am
                                  "Woke to whoosh, whoosh whoosh, and
148 1
pronounced hum. V difficult to get back to sleep " Yes
                       Frosty morning so v loud this morning even though
    1 20/11/2006
wind is more westerly than southerly Yes
                                                  Yes
          21/11/2006 5.00 am "Woke at 5.00 am - Frosty mornings seem to
make the sounds carry so we get whoosh, thump, hum and WD40 noise all early in
the morning."
             Yes Yes Yes
          22/11/2006
                           Whooshing well yesterday evening - occasional
short episodes of AM as well. Particularly from 17.50 onwards. But Julian home
at 8pm and less obvious then. Hum ever pervading
                                                  Yes
          23/11/2006 04.11 am Woken by whoosh at 4.11. Got back to sleep
eventually. Hum very loud and insistent this morning. Yes
                                                              Yes
        24/11/2006 04.18 am "Woken by whoosh at 4.18. Couldn't get back
to sleep.. Hum very loud and insistent this morning. Thud back later in the day.
AM happening from about 10.35 pm onwards, really difficult to get to
sleep?. Interestingly our house guest has also woken at ""stupid o'clock"" many
mornings this week as well which turn out to be the same times as house although
she cant hear anything specific she finds she is startled awake.."
                                                                    Yes
     Yes
                                 "Woken by AM at 3.58 am, impossible to go
          25/11/2006 03.58 am
back to sleep. By 7 am the AM had gone but the whoosh was very insistent and
the hum pervasive." Yes
                                  Yes
                           "We slept at other end of the windfarm last night
          26/11/2006
    1
and slept all night without waking up at all and no hum detectable either.
Bliss! 9 hours sleep in a strange bed by the road???AM from about 5pm - in
alternating bursts - really difficult to get to sleep - still awake at 11.30 pm,
wd40 and hum also very insistent" Yes Yes
156 1 27/11/2006 04.03 am "Woken early again - hum, WD40 and whoosh
terrible - we seem to have heard it all night - bit like lying 3 yards from a
railway track with a never ending train going past?and we took sleeping tablets
last night as well. House guest also found it difficult to get to sleep and stay
asleep last night - which considering that she used to live in the M25/M4/M40
triangle next to Heathrow airport takes some doing!)"Yes
    1
        28/11/2006 05.02 am "Difficult getting to sleep last night due
to whoosh, wd40 and hum. Still awake an hour after going to bed (unusual) but
slept till 5 am which is an hour longer than recently."
                                                       Yes
           29/11/2006
                           "Jane exhausted so went to sleep at friends - bed
at 10 pm last night slept till 11 am this morning!!. Julian stayed at home - bed
at 12 as noise so bad. woke at 05.30 am? Turbines noisy all day today - with
periods of Am, WD40 and the hum!"
                                 Yes Yes
                                             Yes
                            Very difficult to get to sleep - still awake (both
           30/11/2006
    1
) at 1 am?.and awake again - briefly at 4.04 am and then 5.55 am Yes Yes Yes
         01/12/2006
                           Jane slept out last night - as is spending the day
    1
in Sheffield and needs to be awake and alert. Yes
161 1
          02/12/2006
                           Jane and Julian slept out last night
     Yes
162
     1 03/12/2006
                            "Jane and Julian slept out last night, home to the
hum!" Yes
                Yes
163
        04/12/2006
                           Windy day today - woke at 4.14 am - and eventually
```

```
Yes
164 1
          05/12/2006
                      Not too bad today as far as the whoosh - but awful
hum and WD40 in house. Yes $165-1$ 06/12/2006 Woke early am but did get back to sleep. Turbines
very very noisy at 10.45 pm onwards as we were trying to get to sleep - ended up
taking a sleeping tablet at about 11.30 pm yes
                                                     Yes
166 1
          07/12/2006 03.03 am Its an interesting fact that whenever the
wind switches to the south - that is when we are woken up. The wind in the SW
does not create a whoosh - but the hum and WD40 effect are louder from this
direction. yes
                     Yes
167 1 08/12/2006
                          Great - up three times in the night with a sick
child and the accompaniment of whoosh?. yes
                                                Yes
                     Slept OK but WD 40 noise very loud as is hum?..yes
          09/12/2006
          10/12/2006
                           Slept out last night - till 09.30 am
169 1
    Yes
170 1
         11/12/2006 02.10 am
                                "Woke briefly at 02.10 to general noise of
whoosh and associated racket, but did go back to sleep."
171 1 12/12/2006 03.10 am Woke up to whoosh at 03.10 But did get back
to sleep - WD40 and hum insistent! Properly awake to whoosh at 06.00 (alarm set
for 06.35) Yes
                    Yes
    1 13/12/2006 01.16 am Woke up to whoosh at 01.16!!! But did get
back to sleep - WD40 and hum insistent! Yes Yes
173 1 14/12/2006 05.00 am woke abruptly at 5.00 am to whoosh and WD40.
Had to get up as noise was so bad?.. Yes
                                                Yes
174 1 15/12/2006 05.17 am woke abruptly at 5.00 am to whoosh and WD40.
Had to get up as noise was so bad?.. Yes
                                                Yes
175 1 16/12/2006 "Not a bad day - some whoosh audible at bedtime,
and the hum is ever present." Yes
                                         Yes
        17/12/2006 Hum and Wd40 noises only today
176
    1
                                                                      Yes
          18/12/2006
177 1
                          Hum only today
                                                   Yes
178 1
                          Hum only today
         19/12/2006
179 1
                          Fog - and although WD40 is present it is getting
         20/12/2006
quieter?
                     Yes
         21/12/2006
                          BLISS - FREEZING FOG and just a very very tiny
180 0
hum! Woke at 7.20 am in own bed!
                                           Tiny
                          BLISS - FREEZING FOG and just a very very tiny
    0 22/12/2006
hum!
                Tiny
182 1
          23/12/2006 06.20 am
                               The hum is back???????with a vengeance
          Yes
183 1
           24/12/2006
                          Hum only today
    1
184
          25/12/2006
                           Hum only today
    1
185
          26/12/2006
                           Hum only today
        27/12/2006
     1
                          Hum only in the daytime but whooshing started
again towards bedtime. (10.30 pm)
187 1 28/12/2006 19:00 "Turbines whooshing with some periods of AM at
about 7 pm, difficult to get to sleep due to the racket - sleeping pills
required in the end."
                    Yes
                                Yes
188 1 29/12/2006 3:00 woke briefly at 3 am and then again at 5.17 to the
hum???.
          Yes
                     Yes
189 1
          30/12/2006 04.37 am
                                "Woke to the whoosh, and wd 40"
     Yes
190
    1
          31/12/2006 03.16 am
                                "Woke to the hum, got back to sleep, woke
again at 05.20 am (both of us)??"
                                           Yes
191 0 01/01/2007 "Very windy night, ambient wind noise meant
anything else was drowned out. Went to bed at 01.30 am slept till 10.45 am in
own beds!!!"
192 1
         02/01/2007
                        Still very windy and wind from north so relatively
peaceful apart from the hum!
                                     Yes
193 1
        03/01/2007 Hum annoying and intense.
           04/01/2007 04.20 am Hum very intense
195 1 05/01/2007 03.46 am; 04.16 am; "Woke to intense hum, dozed for a
bit then gave up and got up at 04.20. WD40 effect also loud and whoosh
```

got back to sleep at 6.15 am so overslept and missed a 9 am appointment! Yes

```
discernible." Yes
                            Yes
196 1 06/01/2007
                            Hum noticeable early morning and evening
particularly
                            Yes
197 1
           07/01/2007
                            Hum noticeable early morning and evening
particularly
                            Yes
          08/01/2007
198 1
                            Hum noticeable early morning and evening
particularly
                            Yes
           09/01/2007
199 1
                            Hum noticeable early morning and evening
particularly
                            Yes
200 1
           10/01/2007
                            Hum noticeable early morning and evening
particularly
                            Yes
201 1
           11/01/2007
                           Hum noticeable early morning and evening
particularly. Really windy today therefore any background noise outside is
masked - but inside the hum is very loud. Yes
202 1 12/01/2007
                           Hum noticeable early morning and evening
particularly. Really windy today therefore any background noise outside is
masked - but inside the hum is very loud.
         13/01/2007
                           Hum noticeable early morning and evening
particularly. Really windy today therefore any background noise outside is
masked - but inside the hum is very loud.
                                                  Yes
204 1 14/01/2007
                           Hum noticeable early morning and evening
particularly. Really windy today therefore any background noise outside is
masked - but inside the hum is very loud.
                                                  Yes
205 1 15/01/2007
                           Hum noticeable early morning and evening
particularly. Really windy today therefore any background noise outside is
masked - but inside the hum is very loud.
206 1 16/01/2007
                           Hum noticeable early morning and evening
particularly. Really windy today therefore any background noise outside is
masked - but inside the hum is very loud.
                                                  Yes
207 1 17/01/2007
                          Hum noticeable early morning and evening
particularly. Really windy today therefore any background noise outside is
masked - but inside the hum is very loud.
                                                  Yes
208 1 18/01/2007
                       Hum noticeable early morning and evening
particularly. Really windy today therefore any background noise outside is
masked - but inside the hum is very loud.
                                                  Yes
209 1
        19/01/2007
                           Hum noticeable early morning and evening
particularly
                            Yes
                            Hum noticeable early morning and evening
210 1
           20/01/2007
particularly
                            Yes
211 1
           21/01/2007
                            Hum noticeable early morning and evening
particularly. Julian complaining of unusual ear bubbling issues.
     Yes
212
    1
           22/01/2007
                            Hum noticeable early morning and evening
particularly
                            Yes
213 1
         23/01/2007
                            "Hum very noticeable early morning and evening
particularly, Seems to have increased in pitch. whoosh present as well"
           Yes
                            "10.20 pm went to bed - hum very loud, then WHUMP,
214
    1
           24/01/2007
WHUMP started. Got up, dressed and went outside - raining and turbines making
WHUMP WHUMP noise very loudly. Eventually managed to get back to sleep at 1.30
am?." Yes
               Yes
215 1
          25/01/2007
                            "Hum noticeable early morning and evening
particularly. Turbine blade noise (whoosh, whoosh) very audible" Yes
                                                                          Yes
216 1 26/01/2007
                           "Hum noticeable early morning and evening
particularly. Turbine blade noise (whoosh, whoosh) very audible. Recorded for
Radio 4" Yes
                      Yes
217 1
           27/01/2007
                            Hum noticeably louder again.
                                                                    Yes
218 1
           28/01/2007
                            Hum noticeable early morning and evening
particularly
                            Yes
          29/01/2007
219 1
                            Hum noticeable early morning and evening
particularly
                            Yes
220 1
          30/01/2007
                            Hum noticeable early morning and evening
particularly
                            Yes
          31/01/2007 04.30 am Jane woke at 4.30 to a whoosh - which
221 1
```

```
Yes
          01/02/2007 04.30 am
                                 Julian awake at 04.40 Hum noticeable early
morning and evening particularly Yes Yes
223 1 02/02/2007 04.30 am Julian awake at 04.40 Hum noticeable early
morning and evening particularly
                                 Yes Yes
224 1 03/02/2007 05.45 am Julian awake at 04.40 Hum noticeable early
morning and evening particularly
                                            Yes
225 1
          04/02/2007
                           Turbines still last night and this morning. Hum
noticeable early morning and evening particularly. Ears irritating again today.
                Yes
           05/02/2007
                           Hum noticeable early morning and evening
226 1
particularly. Julian has a Bad ear reaction - left ear in particular.
227 1
           06/02/2007
                           Hum noticeable early morning and evening
particularly
                           Yes
           07/02/2007
228 1
                           Hum slightly less today
229 1
           08/02/2007
                          A mole returned today to dig three small mole
hills. And the hum was less and it snowed.
         09/02/2007 "Hum starting to increase again and noticeable
early morning and evening particularly, became moderately loud."
                                                                        Yes
                          Hum noticeable early morning and evening
         10/02/2007
particularly
                           Yes
         11/02/2007
                          Hum noticeable early morning and evening
232 1
particularly. Some whooshing coming back..
                                                       Yes
233 0 12/02/2007
                          Away
                                            Yes
234 0
          13/02/2007
                           Away
                                            Yes
235 1
          14/02/2007
                                            Yes
                           Away
236 1
         15/02/2007 05.10 am Woken by the whoosh again! Its back - with a
vengeance and the hum seems louder and more pervasive than ever. Some modulation
present. Yes
                     Yes
          16/02/2007 04.55 am
                                "Woken by the whoosh?.and the hum, In the
237 1
evening - at 7pm we also had some short intermittent episodes of Modulation,"
     Yes
                Yes
238
           17/02/2007 04.02 am
                                "Whoosh, whoosh, whoosh and hum very bad" Yes
     1
           Yes
239
           18/02/2007
                          Jane away. Hum bad at home
           19/02/2007 "03.16 am, 05.02 am" "Woken by the whoosh, whoosh,
240
whoosh, Hum bad too?after perhaps two months of relative peace (apart from the
hum ) it looks as if we are back to the problems of all last summer and autumn."
     Yes
                Yes
241
     1
           20/02/2007
                           Slept at our sleeping house.
                                                                  Yes
242
     1
          21/02/2007
                           Slept at our sleeping house.
                                                                  Yes
243
     1
          22/02/2007
                           Slept at our sleeping house.
                                                                  Yes
                          Slept at our sleeping house.
    1
          23/02/2007
244
                                                                  Yes
    1
          24/02/2007
                          Slept at our sleeping house.
245
                                                                  Yes
    1
          25/02/2007
                          Slept at our sleeping house.
246
                                                                   Yes
    1
          26/02/2007
                           Slept at our sleeping house.
247
          27/02/2007
248
    1
                           Slept at home
                                                       Yes
    1
249
          28/02/2007
                           Slept at home
                                                       Yes
250
     1
          01/03/2007 04.12 am
                                 "Slept at home (big mistake) Woke to the
whoosh, and wd 40"
                  Yes
                                 Yes
251 1 02/03/2007
                           Audible throughout the day intermittently. Left at
10 pm to go to sleeping house.. Yes
                                            Yes
252 1 03/03/2007 "Slept out last night, invited friends round to
hear the modulation tonight (Sat) before we left to go to our sleeping house!"
     Yes
                Yes
         04/03/2007
     1
                           Ok today (i.e no whoosh) until 5pm when we had
some modulation for a short while - then it quietened for a bit - left home at
10 pm to go to sleeping house. Yes
                                           Yes
254 1
          05/03/2007 Audible throughout the day intermittently.
           Yes
           06/03/2007 05.20 am Slept at home last night?intermittent sleep
and finally it all got too much by 05.20 am
```

stopped quite quickly. Hum noticeable early morning and evening particularly Yes

```
07/03/2007 Slept at our sleeping house.
08/03/2007 Slept at our sleeping house.
09/03/2007 Slept at our sleeping house.
256 1
                                                                        Yes
257
     1
                                                                        Yes
258
                                                                        Yes
           10/03/2007 Slept at our sleeping house. Yes 11/03/2007 Whoosh audible for most of the day - quite loud in
259
260
    1
the evening. Audible over a loud background wind speed. Yes Yes
261 1 12/03/2007 Woke early for GMTV. Whoosh definitely audible -
although not possible to record. Yes Yes
262 1 13/03/2007 Slept at our sleeping house.
            14/03/2007 03.14 am Startled awake to become instantly aware of
263
the hum and a faint but insistent whoosh
                                                      Yes
264 1 15/03/2007 Slept at our sleeping house.
                                                                        Yes
265 1
           16/03/2007
                            Slept at our sleeping house.
                                                                        Yes
266 1
           17/03/2007
                            Slept at our sleeping house.
                                                                       Yes
267 1
          18/03/2007
                            Slept at our sleeping house.
                                                                       Yes
                           Slept at our sleeping house.
          19/03/2007
268 1
                                                                       Yes
269 1
          20/03/2007
                                                                       Yes
270 1
          21/03/2007
                                                                       Yes
271 1
          22/03/2007
272 1
          23/03/2007
273 1
          24/03/2007
25/03/2007
274 1
         26/03/2007
27/03/2007
28/03/2007
29/03/2007
275 1
                            Slept at our sleeping house.
                                                                       Yes
276 1
                            Slept at our sleeping house.
                                                                       Yes
277 1
                            Slept at our sleeping house.
                                                                       Yes
278 1
                            Slept at our sleeping house.
279 1
          30/03/2007
                            Slept at our sleeping house.
                                                                       Yes
280 1
           31/03/2007
                            Slept at our sleeping house.
         01/04/2007
281 1
                             "Slept at home, turbines NE so quiet but hum
apparent."
                        Yes
          02/04/2007
                             "Slept at home, turbines NE so quiet but hum
282 1
apparent."
                        Yes
          03/04/2007
283 1
                              Slept out
                                                     Yes
         04/04/2007
    1
284
                              Audible throughout the day intermittently.
           Yes
285 0
            05/04/2007
                                               Yes
                             Away
286 0
           06/04/2007
                             Away
                                                Yes
    0
                             Away
287
           07/04/2007
                                                Yes
288 0
                             Away
          08/04/2007
                                                Yes
    0
                             Away
          09/04/2007
289
                                                Yes
290 1
           10/04/2007
                             Home but slept out
291
           11/04/2007
                             Slept at home turbines quiet hum quiet too - but
still there! Slept with fan on.
                                                Yes
    1 12/04/2007 Slept at home turbines quiet hum quiet too - but
still there!
                              Yes - very faint
293
    1 13/04/2007
                              Slept at home turbines quiet hum quiet too - but
still there!
                              Yes - very faint
294 1 14/04/2007
                             Slept at home turbines quiet hum quiet too - but
still there!
                             Yes - very faint
                            Slept at home turbines quiet hum quiet too - but
295 1 15/04/2007
still there!
                             Yes - very faint
                        Turbines whooshing again!
Away doing presentations
296 1 16/04/2007
                                                                        Yes
        17/04/2007
18/04/2007
19/04/2007
20/04/2007
    0
297
298 0
                            Away doing presentations
299 0
                             Away doing presentations
300
    1
                             Terrible - AM from 6pm onwards till we left to
sleep in our other house at 10.30 pm Yes Yes
301 1 21/04/2007 Not so bad today - renewable energy day at Mr
Watts and one turbine off No. 5 Yes Yes
302 1 22/04/2007 Not so bad today - definitely less noise with No 5
off - but wind direction not at us. Yes Yes
303 1 23/04/2007 Not so bad today - definitely less noise with No 5
off - but wind direction not at us. Yes Yes
         24/04/2007 "02.00, 04.00 & 05.30" "Difficult night - slept at home
304 1
```

last night - and afternoon shocking when No. 5 started again thump, thump, thump." Yes Yes Slept at our sleeping house. Yes 305 1 25/04/2007 1 Slept at our sleeping house. Yes 306 26/04/2007 Yes 307 1 27/04/2007 Swish clearly audible today - and loud even though wind is from the East! Slept at our sleeping house Yes Yes 28/04/2007, to 20/06/2007 308 Slept at our sleeping house. Yes Yes 354 13/06/2007 Slept at our sleeping house. Turbines working in opposite directions Yes Yes "Slept at our sleeping house, but turbines were 21/06/2007 very noisy and performed beautifully for visitors." Yes Yes 22/06/2007 to date?10/06/2008 Slept at our sleeping house. Now moved in permanently. Only going home to feed the cats and for Julian to have as a base in the day as he tries to carry on farming. Yes 05/07/2007 "Slept at our sleeping house, but turbines were very noisy and performed beautifully for visitors." Yes Yes Yes 06/07/2007 378 07/07/2007 274 Days affected in first year of operation = 274 Plus a full year 2007 to 2008 as we can no longer live at home.

On Jan 22 2008, RON. WILLIAMS wrote:

Hello Jane,

Extract from the local paper:

?Meanwhile, a West Cumbrian man claims his life has been made a total misery because of a huge windfarm near Moota.

Ron Williams revealed that he was taking sleeping pills and suffering mental anguish because of turbines near his Bothel home.

The 73-year old warned that unless planners started to consider the effect of low frequency noise from windfarms, people in Dearham and those living near Tallentire Hill - where another windfarm is proposed - can look forward to the same torture.

Mr Williams is now warning others to fight windfarms proposals close to their properties and he is urging the authorities to consider the impact on people, and especially the impact of low frequency noise.

Mr Williams?s house at The Swallows, Bothel, is $833\ \mathrm{metres}$ away from the Wharrels Hills windfarm.

He said: ?The swush, swush, swush as each blade breaks the flow of the wind past the tower, three times per revolution, is extremely debilitating.

Mr Williams said his GP had prescribed sleeping pills.

He added: ?In my diary I have recorded, since December 3 until February 26, that on 19 nights I have needed to resort to medication.

?During that time we were away for five nights and the mills did not operate for seven days due to very high winds. That is an average of taking medication twice a week."

 \mbox{Mr} Williams questioned whether the effects of low frequency noise had been thoroughly investigated.

He added: ?Such noise was used as a form of torture during the last war and is said to be currently used by the Americans."

There has been a substantial visual impact, too. Because the entire living area of his house faces the turbines the visual background rotation is very distracting, he said.

At certain angles sunlight hits the blades which reflects rays through his lounge.

Mr Williams said: ?This very disturbing flickering stroboscopic effect is such that both blinds and curtains need to be drawn closed, even on a warm sunny day. ?And even then this flickering can be seen as dark shadows moving over the window area."

 ${\tt Mr}$ Williams said that on a sunny winter?s day dark silhouettes flashed through the rooms.

He claimed that evidence indicated that houses near turbines lost 25 to 30 per cent of their value.?

PS Have kept a diary on how many of the mills are turning (whether they are generating is another question!) during the daytime. Not very scientific but I jot down the figure when I occasionally glance that direction. (at present only 3 of the 8 are turning). I have made a chart and sent it to ***** He is keeping a log, apparently, as an argument about their efficiency..

RW

This statement is made by Lynn Harlock, Newtons Farm, Chatteris Road, Warboys, Huntingdon, Cambs. PE28 2UH. Tel: 01354 692301

Twelve, 100 metre turbines have been erected to the front and the side of our cottage. The first we knew about these turbines was when the diggers arrived to start excavating the site.

Two turbines are only 700 metres from our home. One of these is directly in front and one is to the side of our cottage.

We have done such a lot to our home. It was a wreck when we bought it, we had to shovel the rubbish out. We renovated the cottage and made the garden from a field. Now it is really lovely.

We never intended to sell, but would we be able to sell it now? We bought it from the Council and yet they have permitted these turbines to be built on their

These turbines cause us three main problems: Noise, shadow flicker/strobing and TV reception interference.

NOISE

Noise is a particular problem when there is a westerly, moderate wind. We get these winds frequently right through November, December, January, February and March. However, this noise can occur at any time when the wind comes from one direction and reaches a certain speed. We know that when the turbines have their backs to us and the wind picks up, we are in for a noisy night.

Our bungalow faces straight on to the turbines and our bedroom is in the front of the bungalow. However, the noise is present in all the bedrooms and rooms, including those at the back.

The turbines, whoosh, thud and bang. The noise disturbs your sleep. At night when you put your head down, it is like an empty bulk load lorry going along a bumpy road. It is as if there is a piece of metal in the back of the lorry and this will thud through the house all night.

Once you have been awaked by the turbines you just lie there listening to them and although you are tired you cannot get back to sleep. There is a thud, thud, thud; it is like a constant vibration. We are tired but we can?t sleep we just lie there listening to the turbines.

If it is a warm night and you open the window, it sounds as if the noise is in our bedroom.

The noise is present in the bedrooms both to the front and back of our home. The noise vibrates and runs through your bed, through your pillow and through your head. Even if you put a pillow over your head, you can still hear them.

Often the noise sounds like a car left running on the front drive. When the wind dies and returns, it sounds like vehicles are coming and going. It sounds just like vehicles are turning up on your drive. You are up and down all night, looking out of the window to see who is about. It is very disturbing.

During the day when you are active the noise is bearable. However, in the evening when the wind is in one position, if we are sitting in our lounge we have to have the TV turned up. The noise is monotonous and annoying and we have to keep the windows shut even if it is warm.

The noise can be heard above the sound of the television. Sometimes we have to turn the TV down to reassure ourselves that the noise is just the turbines, because you worry that something else might be making the noise.

SHADOW FLICKER

On clear days, at sunset we also get severe light flickering/ strobing in our bungalow. This is very disturbing. The flickering affects the rooms at the front and the conservatory and the kitchen. We have videoed the flickering in our bedroom and living room.

Even with the blinds closed we cannot keep out the flickering.

Our youngest son came out of hospital last year and was at home for three weeks and he could not sit in our living room and watch TV when the sun was setting as the flicker just passes right through the room.

If we have visitors we have to shut the blinds, but still we cannot shut out the shadow flicker. We have heavy lined curtains in the lounge but even if we close them it still looks as if a car is flashing its lights outside the window.

When the light is flickering, you have to move out of the worst affected rooms. It makes you feel very disorientated and it is impossible to relax.

The flickering also makes it appear that there is someone going by your window because there is this movement going on all the time.

The single turbine erected by Wind Prospect at Whitemoor Prison also causes disturbing shadow flicker. However, in response to complaints from the prison, the turbine does not operate when shadow flicker occurs. Our home suffers shadow flicker from two turbines and yet nothing has been done for us, despite repeated complaints to the Wind Prospect representative, Trevor Gaits. http://uk.youtube.com/watch?v=4MD xGWBRvA

When these turbines had been erected and before they had started turning, I spoke to the owner, Sylvestre Beaufont, in my house. I pointed to the sun and warned him that the turbines were too close and there would be shadow flicker. He assured me that the sun would not flicker the light as far as our cottage. He also assured me there would be no noise problems.

INTERFERENCE WITH TELEVISION RECEPTION

When the turbines were erected the television was blocked. We had no television reception. As a result we were given Freesat. Previously we had the usual television channels and also Freeview on which we were able to obtain a number of extra channels including Sky Sports News. However, Sky Sports News is not available to us on Freesat. We would have to pay for this if we wanted this channel restored.

COMPLAINTS MADE

We have complained repeatedly to our local Parish Council, Huntingdon District Council, Cambridgeshire County Council, the Environmental Health Office and direct to the Developer?s representative, Trevor Gaits of Wind Prospect. We have not found any of these bodies very helpful. We believe their lack of interest may be explained by the complicated business relationships that exist between the various individuals and parties.

Cambridgeshire County Council owns the land on which 9 of the Warboys? turbines are sited. They receive a substantial income from these turbines. The other three turbines are sited on farmed land owned by three private individuals, Messrs. Bond, King and David England (David England is also the planning councillor for Warboys Parish Council and he sub-lets additional land from a Cambridgeshire County Council lessee who is our neighbour).

We have objected repeatedly to the Environmental Health Office. We have been told that Toby Lewis, the EH Officer for our area, came out once one night to investigate the noise. We were going on holiday, so he said he would come out at about mid-night. On the night he visited the site the wind was not coming from the right direction and there was no noise. He then reported that there was no problem with noise.

We do not believe that the EHO have dealt with our complaint seriously, as it is not possible for them to assess the noise nuisance if their officer only visits when the turbines are not emitting the noise about which we complain.

We are concerned that the EHO may feel reluctant to act they are part of Huntingdon District Council who in turn is very closely connected with the landowners, Cambridgeshire County Council.

Our home is a semi-bungalow. Our neighbour does not object to the turbines. However, he leases land from Cambridgeshire County Council and sublets this land to David England who has one of the turbines on another piece of land which he owns. As mentioned above, David England is the Councillor with responsibility for planning at Warboys Parish Council.

Our home is very nearly surrounded by turbines, not just those that are creating problems for our home. Wind turbine developments in our area include:

- ? 12 turbines at Warboys in front of our bungalow.
- ? 8 turbines at Glassmore Bank c6 miles away, which are very visible from the garden.
- ? 5 turbines in the Doddington/March area c8 miles away, visible from our kitchen window.
- ? 1 turbine at Whitemoor Prison, visible from our kitchen window on a clear day.
- ? There are more turbines the other side of Chatteris which are not visible from our home.
- ? A further Wind Prospect development has been approved at Coldham c15 miles away $\,$

We are concerned that cabling for the Warboys? turbines has been laid in such a

way that it will facilitate further wind turbine developments in our area.

The best mornings are foggy mornings. You wake up and you can?t see the turbines, then the fog lifts and they are still there.

I believe that these problems make our house unsaleable. No one would want to live here.

Signed: ???????????????...

Dated: ??????????????...

From Les Nichols. (Cumbria, UK)

With easterly winds I have noise if the NRMS (noise Reduction Management System) system (as finally installed after some extreme pressure on the developers) on ''our" windfarm (Far old Park Farm) is inoperative or maladjusted.

The noise is most prevalent on warm balmy evenings when winds are not too strong, and one wants to have windows open.

The worst noise seems to be late evening or in the early hours of the morning, although it can occur at any time of day or night.

If it wakes you, and it can do so, it is difficult to get to sleep again unless the windows are closed. Headaches also result.

I believe that 'my noise' is exaggerated by amplitude modulation, a phenomena that the wind farm developers do not take into account when conducting their Environmental Impact Surveys (to do so would not be in their favour, and I also believe that they do not fully understand the cause and effect, so it to their benefit to ignore it).

The noise I experience I must stress is NOT, repeat, NOT, mechanical noise, something that the developers always state that they now have under control via improved gearboxes, etc whenever the noise issue is raised at the planning stage..

My noise is the swish and thump as the blades pass the columns.

- I believe that as with amplitude modulation this phenomena is also not at all understood by the wind industry and its effect is also relates to the topography of the windfarm location, and the relative location of the houses .
- It appears to worst effect those houses situated at a level below the windfarm.
- I have not seen an Environmental Impact Survey that directly addresses this phenomena, and this is once again because
- a) It is not understood by the industry and can not be forecast, so the consequences can not be evaluated.
- b) To openly declare that this could be a problem would open Pandora?s box for the industry and put at risk all future planning requests.

The developers are driven by profit and little care for residents, so all these issues are swept under the carpet so to say in their drive to procure the enormous subsidies that windfarms benefit from.

The only solution in my opinion is that it becomes mandatory that Environmental

Impact Surveys must include full simulations of perceived impact of amplitude modulation and the swish and thump of blades passing columns, on any nearby residents.

It must also include the actions the developers plan to take if the prognosis regarding these 2 phenomena is incorrect after the windfarm is in operation, and the actions they will take to alleviate the resu; ltant noise nuisance issues.

Les Nichols

Gail Mair Italian Windfarm

ITALIAN WINDFARM DIARY

The following is a twelve-month diary (January 2007 through December 2007) meticulously kept by a

woman named Gail Mair (MA, Cambridge University). Gail lives with her husband Walter in Tuscany,

Italy. Gail (fluent in English, German, and Italian) and Walter (a native of Italy) bought this piece of

property some years ago and, in October 2006, moved into the (modest) dream house they had just built.

It was to be their retirement home.

As it happens, as they were finishing construction of their new home, the wind developer, Gamesa, was

finishing up building its windfarm in their neighborhood. In November 2006, a month after Gail and Walter

had their house-warming party, the turbines were turned on. Their lives ever since have been hellish

(except for briefs trips away). Day after day. Relentless. Unending. Gail and Walter have asked that their

diary be circulated widely, in the hope of saving other communities and individuals from the misery and

horror they are living through.

Contact information (address, email, and phone) is given at the end of the diary, which is presented

exactly as Gail wrote it, honey bees and all (they are hobby beekeepers).

Copied by Gail Mair from original with notes - 26 ? 29 December 2007

We moved to Murci in October 2006. We were not informed of the plans to build a wind power station of

this magnitude beforehand.

Parco Eolico di Scansano (wind farm) ? tests started at the beginning of November 2006

We can see 5 turbines on ?our? side of the ridge and the tip of the rotor of one of the other 5 on the other

side of the ridge. There is no day-by-day account for 2006 because we thought that the noise emitted by

the turbines (121m ? including rotor) would be eliminated during the tests. This was not the case and in

fact the noise seems to have increased. We spent Christmas 2006 in Germany but returned to Murci,

Scansano for New Year.

JANUARY 2007

There is little record of the noise produced by the wind turbines in January because we were still

of the opinion that the annoyance would stop. The company which erected the station, Gamesa,

had declared them to be silent, so we were expecting them to fall silent at some stage. This

erroneous statement was echoed everywhere in the press.

However, I recorded the ?Brummton? (the disturbing pulsating buzzing tone heard inside and

outside) for the first time on 4 and 5 January 2007, then on 7, 14 and 27 January 2007 when it

```
was particularly irritating. I spent a lot of the time away from home (in
Grosseto) in January, so
didn?t bother to note down all the noise. There are four entries about the noise
inside and outside:
4 and 5 January, like an airport and 7 January: a low metallic drone and then on
28 January:
heard inside the house.
At the end of January we began to realise that there was a major problem
N.B. The entries were made at different times and these noted. That does not
mean that there
was no noise in between whiles. Most times the noise simply continued changing
timbre, pitch
and volume during the day and night.
Gail Mair Italian Windfarm
FEBRUARY 2007
This was the start of slightly more detailed notes but we were still trying to
differentiate between
different sounds and wind directions and what it was that was making us so edgy.
There seemed
to be no pattern we could discern.
Pulsating buzzing tone:
4,5,11,12,15 (low), 16 ? (woke me up during the night) and 22 February 2007
Outside noise
4 & 5 ? heard in house with shutters closed
6 & 7 ? like an airport (I grew up near Heathrow, London, so I know what I?m
talking about)
10 ? metallic drone
11 ? metallic drone ? strong physical and mental agitation
14 ? metallic drone a.m. agitation (10.30 a.m.), low airport noise p.m. heard in
house with
shutters closed
15, 17 ? metallic drone (even with no mills going this side!), airport
18 ? airport
21, 22 ? (1 turbine),
23, 24 ? metallic drone
25 ? rain 6.30 ? 7.00 a.m. horrifically loud
Holidays from Sunday 25 February ? 14 March 2007 I can see by my writing how
elated I was to
be going.
MARCH 2007
15 ? whiney, metallic drone
16 ? (PET exams at Follonica ? I am an oral examiner for Cambridge language
exams)
This is not relevant to the diary but it was noted on the hand-written original.
Pulsating buzzing sound: 21, 22, 25, 26, 27,28,29, 31
18 ? airport
19 ? airport a.m. ? felt queasy and nauseous ? rain ? loud whine in the evening
20 ? hail in the night ? airport
21 ? airport
22 ? BEC (oral exams in Rome) airport p.m.
23 ? turbines (can?t remember what that was meant to be)
24 ? airport p.m. SE wind ? heard inside house/bedroom with shutters closed
25 ? 8 a.m. airport SSE wind ? turbines ? heard inside house/bedroom with
shutters
closed
26 ? misery and bouts of weeping rain
27 ? nervousness
28 ? rainy ? sound from turbines like a vacuum cleaner. No movement, but still
the metallic
whine ? felt queasy and nauseous again ? 5 p.m. peace ? very little noise
(because men are
working up there? Meaning at the power station.)
```

```
29 ? rainy ? vacuum cleaner noise (from the turbines), pulsating buzzing, misery
and
more weeping
30 ? vacuum cleaner
31 ? vacuum cleaner ? pulsating buzz ? sunny and cold ? turbines off, no drone
in house (in the
afternoon) but still a hum. Cried (howled) again
Gail Mair Italian Windfarm
APRIL 2007
1 ? vacuum cleaner ? woke up twice in the night because of pulsating buzzing
noise (3 am and
6 am) Walter woke up at 2 a.m. and 4.30 a.m. Buzzing loud at 18.30.
2 ? misery and crying ? found comfort at a friend?s house. I remember that day
particularly, I
couldn?t go back to sleep and sobbed my way up the road to her house. No
turbines, no buzzing
that night ? SLEEP!
3 ? noise stopped in the morning but in the afternoon the vacuum cleaner noise
started again
but NO buzzing sound!
4 ? loud swish heard in house at la.m. (night)
5 ? NE wind. 8 a.m. turbines stopped, but started at 9 a.m. Airport heard in
house (afternoon) In
the evening the turbines stood still but there was still a metallic drone like a
vacuum cleaner.
6 ? W wind ? turbines stopped 8 a.m. ? PEACE ? but I cried again in a friend?s
office ? (it wasn?t
the first time that I?d broken down in front of him and I?m NOT a weepy type AT
ALL ? I was very
embarrassed that I couldn?t hold it back)
7 ? strong agitation ? 1 p.m. buzzing noise ? telephone dead again
8 & 9 ? ESCAPE ? HOLS [holidays] (in South Tyrol)
10 ? woke up 3 a.m. because of palpitations (fast beating heart)
11 ? woke up again because of palpitations ? 5.30 the egg? timer went off
12 ? vacuum cleaner noise ? pulsation (buzzing tone) started again ? agitation ?
all 5 turbines
rotating
13 ? vacuum cleaner
14 ? my husband woke up 1.30 because of noise
15 ? NE wind 7.30 a.m. loud airport swish heard inside. SSW wind 11.30 ? sounded
motorway on the terrace ? from 13.30 onwards, vacuum cleaner ? my husband woke
up 2.30.
16 ? NE wind ? loud airport same as yesterday from 7 a.m. to 8p.m.? buzzing low
but it woke
me up again.
17 ? 13.30 cried ? buzzing sound ? NW wind ? airport in the evening. Turbines
loud. 23.30 ?
maddening noise inside house, turbines.
18 ? woke up during the night and cried because of the buzzing ? in the
afternoon
vacuum cleaner ? HORRIFICALLY LOUD 22.30
19 ? 12.30 horrific pulsating buzzing sound ? queasy and nauseous. Same terrible
pulsation at
00.15
I escaped to England from 20? 28 April 2007 but my husband continued the record
(in
italics)
22 ? 4.30 a.m. no wind but loud turbines (he woke up)
26 ? 4 a.m. utter madness (intolerably loud pulsating sound) East wind ? same
again at
8 a.m.
27 ? 4 a.m. a hell of a racket and loud pulsating sound ? East wind. Same at 8
```

```
28 ? 5 a.m. down here no wind, up there they?re grinding (rotating)
29 peace (p.m. vacuum cleaner for a short time)
30 ? 11 a.m. pulsating started, several blackouts, 18.00 only no. 3 turning but
loud turbine noise.
MAY 2007
1 ? Thundery, pulsating ? 9 p.m. loud drone outside
2 ? a.m. swish ? we went to Florence ? p.m. loud turbine whine
3 ? S wind. 2? 3 p.m. loud swish till evening ? heard in house ? rain Gail Mair
Italian Windfarm
Diary
4 ? S wind rain ? loud swish in house ? all day turbine noise
5 ? 8.30 terrible ? rain ? turbines ? ringing ears
Gail Mair Italian Windfarm
6 ? turbines standing still in the morning but pulsating sound in house, queasy
and earache ?
relative PEACE this evening. Two friends came to assess the situation possibly
for an article (but
nothing came of this)
7 ? NNW wind ? vacuum cleaner ? pulsating sound ? queasy ? thundery
8 ? Vacuum cleaner, turbines LOUD in the evening. AWFUL AT NIGHT
9 ? SE wind ?? airport ? pulsating sound
10 ? Turbines still in the morning but strong pulsing buzzing ? trembling in
arms, legs,
fingers
11 ? Holidays! I think we went out for the day ? South wind ? loud turbines in
the evening
12 ? SE wind ? turbines loud ? headache and pressure in my ears ? loud turbines
in the
evening and airport
13 ? 8 a.m. turbines still but noise started at 9 a.m. A guest of ours noticed
the noise and
said ?awful?
14 ? SE wind ? woke up 3 times during night 2.45 pulsating/buzzing ? headache ?
window open ? turbines louder at night. A.m. airport, pulsation and I cried
15 ? NW wind ? vacuum cleaner ? strong agitation ? depressed ? very tense
16 ? Pulsating loud ? woke me up twice with pulsing in my ears ? despite
earplugs ?
wept
17 ? Loud turbines ? pulsating ? queasy and nauseous
18 ? Pulsating loud during the night ? headache and earache in the morning ?
escaped to
Grosseto
19 ? A.m. loud swish ? examined in Castel del Piano
20 ? Vacuum cleaner, pulsating sound at night EP (earplugs but they don?t help
because the vibrations are picked up by my body, too)
21 ? a.m. still ? queasy in the afternoon. No pulsating at night or very low.
22 ? headache ? out all day ? vacuum cleaner in the evening
23 ? headache ? turbines standing still but still there is the metallic (vacuum
cleaner) drone all
day and the swish of the rotors ? thundery ? 3 drops of rain
24 ? discovered 3 queen cells in my bee colony. Woke up at 4 a.m. very agitated,
strong
pulsating sound10 a.m. ? really bad 23.30 (at the side: shopping list for motor
oil)
25 ? bad pulsating sound 5 a.m. metallic drone terrible in the evening
26 ? Airport ? terrible ? motorway
27 ? Vacuum cleaner ? we went up to the station today and strange clunking and
grinding noises
were coming from turbine no. 4 when the rotors went over a certain point.
28 ? Rain ? airport ? up at the station again ? men in turbine no. 4 (to
repair?)
29 ? I escaped to Grosseto
```

a.m.

```
30 ? Metallic drone ? pulsating sound 9.30
31 ? Metallic drone ? 10.30 p.m. loud ? heard in house with windows shut
JUNE 2007
1 ? 6 a.m. heard in house ? in the evening metallic drone
2 ? swish, turbines loud, rain
3 ? rain ? pulsating sound p.m.
4 ? low metallic drone ? pulsating sound ? loud swish
5 ? metallic drone ? swish ? pulsating sound ? earache ? thundery
6 ? ditto (bees swarmed)
7 ? vacuum cleaner ? pulsating sound
8 ? ditto
9 ? Gail out all day ? Rome
10 ? vacuum cleaner from 16.00, pulsating at night ? new bee queen ?tooting?
11 ? pulsating
12 ? vacuum cleaner all day
13 ? ditto ? another small swarm
14 ? vacuum cleaner and pulsating all day ? jittery
Gail Mair Italian Windfarm
15 ? airport ? woke up at 3 a.m. loud pulsating
16 ? vacuum and pulsating
17 ? vacuum and pulsating, tried earplugs again ? didn?t work
18 ? metallic drone ? loud. Inauguration of the [wind power] station in the
afternoon ? the turbines
were making only a gentle swish (but we?ve since learned that this can be done
at the flick of a
switch. When they came to measure the noise levels, they turned them off
completely to get
readings of ?before and after?)
19 ? loud metallic drone and swish
20 ? loud metallic drone
21 ? HEAVENLY PEACE IN THE MORNING
22 ? metallic drone
23 ? Gail Rome
24 ? Gail Rome ? in the evening SE wind, very loud swish heard in house
25 ? loud swish, airport all day
26 ? metallic drone
27 ? metallic drone and loud swish ? pulsating sound started in the evening
(20.30 but also
before)
28 ? metallic drone ? 12.00 exquisite peace (the reason we wanted to live here
in the first
place) ? evening pulsating sound
29 ? quiet in the morning but metallic drone in the afternoon and the pulsating
buzzing
30 ? pulsating buzzing
JULY 2007
I was working in a hotel 6 evenings a week this month, so the entries are less
detailed. I usually
arrived home around 24.00
1 ? (aspo = aspirapolvere = vacuum cleaner (VC) = metallic drone (MD)) VC ? loud
swish? 1 p.m. loud!
2 ? airport ? pulsating ? 7p.m. VC loud ? our carpenter made a comment on the
annoying sound
3 ? VC and pulsating
4 ? airport
5 ? VC loud ? 24.30 terribly loud and pulsating
6 ? VC loud
7 ? VC loud 24.00 (Vacuum cleaner drone ? awful ? marvellously starry sky and
this bloody
noise)
8 ? VC
9 ? VC ? loud turbine swish at 00.20
10 ? VC ? pulsating sound ? p.m. loud turbine swish ? Maestrale wind (NW) ? my
```

```
free day
11 ? VC in the morning in the afternoon the sound changed to washing machine
(drone and rotor
swish) and airport ? loud VC and pulsating
12 ? in the morning perfect peace ? only the birds. In the afternoon the
metallic whine started
again. 00.00 loud pulsating noise ? my husband heard it
13
14 ? VC loud and pulsating
15 ? horrible droning sound ? had to close window for afternoon nap (it was well
into summer by
now and we couldn?t have the windows open at night) ? depressed
16 ? no wind but horrible drone ? depressed
17 ? no wind but same horrible drone. My day off? NO PEACE
18 ? 13.00 no wind but loud drone
19 ? whine
20 ? whine and loud swish (01.30 LOUD!)
21 ? whine loud
22 ? same 01.00 ? loud swish and whine
23 ? same ? AIRPORT 01.00 ? loud
Gail Mair Italian Windfarm
24 ? 4 a.m. ? AIRPORT, evening ? AIRPORT
25 ? same ? earache
26 ? turbines standing still but there is still the whine (from the generators?)
27 ? 00.00 loud swish from rotors
28 ? turbines and washing machine noise
29 ? same
30 ? little noise
31 ? almost nothing, what peace!
AUGUST 2007
1 ? loud swish ? in the afternoon little noise ? appetite gone
2 ? marvellous: little noise but in the evening loud swish and whine ? appetite
3 ? airport! Whine! In the evening less noise. ? appetite gone
4 ? quiet
5 ? loud swish ? nausea ? I closed the windows again in the morning straight
after I?d opened
them ? pulsating.
6 ? loud swish ? washing machine ? pulsating
7 ? metallic drone all day
8 ? light wind ? airport ? swish ? GAMESA* HERE TO TAKE MEASUREMENTS ? wind in
the
trees too. (*still waiting for the results of these readings even if we can be
sure the company
wouldn?t publish them if they were too damning?)
9 ? swish and whine and VC ? earache
10 ? earache ? had to close window for afternoon nap ?whine ? pulsating
11 ? earache ? had to close window for afternoon nap ?whine ? pulsating
12 ? strong pulsating buzzing noise in bedroom 00.30
13 ? loud whine
14
15 ? I can?t bear this whine in the morning any more
16
17 ? loud swish all evening ? motorway
18 ? whine whine vacuum cleaner
19 ? whine whine, stir, stir, pulsating
20 ? loud
21 ? loud
22 ? misery
23 ? VC ? loud swish ? misery. I had an accident in the afternoon in Grosseto.
It was raining
heavily and I walked into a half? opened shutter and cut my head on the sharp
metal corner. Got
```

```
24 ?
25 ? whine started 10.15 ? impossible to sit outside in the evening ? windows
closed all night
(HOT)
26 ? 13.30 loud in house had to close windows
27 ? whine started 9.30 ? they?re standing still but there?s still this drone.
DECISION TO LEAVE!
28 ? 13.00 loud drone ? no wind ? sound like a refrigerator?
29 ? loud swish, woke up although windows closed. 23.00 sounded like a washing
machine.
30 ? whine, washing machine
31 ? 9 a.m. loud whine but no movement ? loud swish 23.00
Gail Mair Italian Windfarm
SEPTEMBER 2007
1 ? 7 a.m. pulsating sound
2 ? same ? whine in the evening
3 ? very loud airport p.m. with windows closed
4 ? moderate wind. 7.30 a.m. loud, windows closed ? pulsating in the morning ?
headache ? pulsating all evening, tried earplugs again
ARPAT at a friend?s HOUSE to take readings of the level of noise( ARPAT =
Regionale per la Protezione Ambientale della Toscana)
Our friend returned to her summer house this year to find that one of the towers
built just 100m from her house. The noise is indescribable ? her pet cat would
not leave
the house for the whole of the time they were there and he used to love being
outside. My
husband spent two nights in her house to keep an eye on the equipment . I saw
one of the
readings on September 6th at 11.30 a.m. (in the kitchen with the door open) when
needle oscillated between 60 and 70 ? I take it that the unit dz on the
equipment stood for
dezibel/decibel. We are still waiting for them to publish the findings
5 ? woke up in the night ? pulsating. Airport ? high winds
6 ? VC loud. A.m. 11.00? 12.00 60?\ 70 dz readings in this friend?s house! ? high
winds
7 ? VC, loud swish, morning and evening. Disco effect (stroboscope) from
windmill no.2 in living
room 19.00? 19.15
8 ? took a walk up by the station. Pulsating but turbines standing still. VC.
14.30 meeting with the
wind power opponents from Roccalbegna (the county council wants to build 6 more
in the
neighbouring district) 1p.m. noise stopped. 3 p.m. started VC (can?t quite work
this out ? if I was
at the meeting I wouldn?t have known that, but it quite likely refers to the
following day) pulsating
and disco effect again
9 ? headache ? pulsating and VC ? had to close the window at 18.30 ? airport
10 ? pulsating, woke up several times during the night because of this. Misery
and more tears.
Airport in the evening
11 ? Libeccio (SW wind) and Mezzogiorno (South wind) loud washing machine and
drone. Had to
close windows but could still hear it
12 ? whine, pulsating
13 ? whine
14 ? absolute silence! p.m. whine
15 ? ?our? towers stationary but whine from the other side. 12.30 ? all quiet,
16.00 whining again
```

patched up in hospital ? injury not serious.

```
16 ? all?s quiet, still, 7 a.m.
17 ? very loud swish ? hellish 5? 7pm ? bedroom 00.00 heard in room windows and
shutters
closed
18 ? fog, rain, swish ? evening whine
19 ? whine but little movement
20 ? whine, airport
21 ? 23 cooler during the day
21 12.00, little movement, but whining. I shut the window
22 ? 8 a.m. STILL, 8.30 a little movement
23 ? STILL! p.m. loud whine
24 ? whine throughout the day but turbines not moving
25 ? STILL! Went to the Daniel Spoeri Gardens with a friend ? slight whine in
the evening
26 ? some whine and some quiet
27 ? rain, a.m. loud drone, airport during the night, horrible noise had to
close the window, woke
up often
28 ? pulsating, whining, high wind. Woke up often during the night ? misery
Gail Mair Italian Windfarm
29 ? away most of the day but slept badly again ? misery
30 ? away all day
OCTOBER 2007
1 ? still (a smiley here), silence, peace a.m. ? evening whine
2 ? quiet in the morning ? whining in the evening and pulsating
3 ? still, peace, p.m. quiet drone
4 ? drone ? 12.30 horrible nerve? rending noise
5 ? out all day Thank God ? p.m. drone
6 ? annoying drone
7 October back to Germany ? from this point until I returned on 18 December 2007
husband made notes. I had absolutely no health problems while I was away, not
even a
common cold. No headaches (I was never prone to them anyway), depression or
earache.
My husband?s entries ? he calls the metallic whine ?singing?. I refer back to
this now and
again.
8 ? 5 a.m. turbines ?singing? ? 17.00 ? N ? 21.00
9 ? 8 a.m. silence absolute. Turbines stationary. 17.00 singing (this is what I
called ?whine?)
10 ? ?singing? at 7 a.m. and 18.00, but all turbines stationary
11 ? 9 a.m. turbines singing but stationary. P.m. little noise, 21.00 singing
again
12 ? 8 a.m. singing but very little movement, 18.00 absolute quiet, 21.00
singing
13 ? 9 a.m. singing but very little movement, 16.00 Scirocco (SE wind) washing
machine noise
14 ? 8 a.m. washing machine (Grecale ? NE wind)
15 ? 8 a.m. singing and washing machine, 16.00 singing without the washing
machine
16 ? 8 a.m. and 17.00 absolutely stationary but low pulsating buzzing noise
17 ? singing and pulsating all day
18 ? 6 a.m. stationary turbines, pulsating noise, 19.00 washing machine and
singing LOUD
19 ? 8 a.m. loud (Grecale ? NE wind)
20 ? 8 a.m. loud (Grecale), 20.00 hellishly loud noise
21 ? 6 a.m. hellishly loud and now and again one of them is stationary, 12.00
all still?
My husband was away until the end of the month ? he wrote ?holiday? but meant
Today is December 27, 2007 4.45 am ? I woke up twice during the night with
ringing and the sound of the
```

```
pulsating buzzing in my ears, and a feeling of tightness in mychest. I can?t go
back to sleep ? so I?m
finishing transcribing the entries in the ?diary?.
NOVEMBER 2007
1 ? 9 a.m. washing machine noise ? various sounds ? no. 1 is stationary. Rest of
day ? various
sounds
2 ? 8 a.m. various ? sometimes the turbines are stationary but they still sing.
12.00 nothing doing.
17.00 stationary but singing
3 ? 16.00 quiet. 18.00 singing with little wind and some turbines stationary
4 ? 9.00 singing with little wind. 16.00 loud singing (the metallic whine).
5 ? 9.00 loud singing, little wind, 17.00 the same. Loud and irritating
6 ? 8.00 loud singing stationary, 12.00 loud singing ? irritating, 17.00 ditto
in house, too
7 ? 8.00 washing machine, 16.00 quiet 17.00, now they?re singing
8 ? 11.00 singing so irritating I want to be sick, 17.00 washing machines
9 ? 7.00 washing machines, also in house. Storm
10 ? 8.00 singing, 15.00 same
11 ? washing machines
12 ? 9 a.m. singing, 18.00 washing machines
13 ? 9.00 absolute quiet ? great, 13.30 pulsating, turbines stationary
14 ? 9.00 singing loud and irritating, 10.30 airport and singing
Gail Mair Italian Windfarm
15 ? 8.30 airport
16 ? a lot of wind but relatively quiet. 21.00 airport
17 ? 10.00 singing. 14.00 a hellish noise
18 ? in the morning - airport, no. 1 stationary
19 ? 6.00 horrible singing
20 ? horrible singing, 18.00 hellish noise
21 ? 6.00 hellish noise
22 ? 6.00 hellish noise, 20.00 same
23 ? 10.00 same, 13.00 ? a lot of wind but not much noise. Mezzogiorno (South
wind)
24 ? airport, 15.00 singing, 22.00 airport
25 ? 9.00 singing and airport, 16.00 singing
26 ? 9.00 singing but turbines stationary
27 ? 9.00 and 16.00 singing
28 ? 6.30 pulsating sound, during the day turbines mostly stationary but the
pulsating buzzing
sound is all around, 18.00 airport
29 ? 9 a.m. pulsating. Turbines stationary
30 ? pulsating, stationary turbines, singing, 16.00 terrible ?song? (whine)
DECEMBER 2007
1 ? pulsating, singing, stationary, 21.00 loud singing
2 ? 7.00 hellish performance (Scirocco ? south east wind) heard in house the
whole day
3 ? and the entire night. 21.30 airport, turbines with wrongly positioned
rotors* (*I don?t know why
he said that, have to ask). Mezzogiorno (south wind)
4 ? 17.00 singing
5 ? 7.30 and 19.00 singing
6 ? 8.00 singing, singing though stationary
7 ? 9.00 singing, 11.30 hellish noise, My husband?s brother heard it (and he
lives a 14
minute drive away)
8 ? relatively quiet ? Tramontano (N wind)
9 ? airport
10 ? 9.30 absolute quiet the whole day and the whole night
11 ? same again today
12 ? and today
13 ? and today
From 14 ? 18 December my husband drove to Germany to accompany me back home.
```

According to friends the turbines were stationary AND made absolutely no noise during this time. We have not been able to find out why this was? 19 ? 19.30 airport, p.m. singing (here I took up the diary again and added ? heard in bedroom and kitchen 23.00?) 20 ? no entry ? couldn?t be bothered 21 ? heard in house ? cried 22 ? heard in house 23 ? heard in house, pulsating 24 ? pulsating, misery, cried again 25 ? woke up at 6 a.m. pressure on chest (a feeling of tightness), same as the day before, 7 a.m. turbines stationary but loud industrial whine all day, pressure in ears. 19.30 terrible pulsating sound ? earplugs at 10 p.m. (while I was reading) helped somewhat but pulsating still noticeable 26 ? vacuum cleaner drone ? pulsating in house ? I cried 27 ? woke up twice during the night because of the pulsating drone in my ears. At 4 a.m. I heard loud swishing in the house and feelings of panic kept me awake, so I?m finishing this off. Also had difficulty getting to sleep last night - agitated. Phoned 2 friends and burst into tears on the phone ? they only need ask ?How are you?? and it sets me off. Another friend came to visit this Gail Mair Italian Windfarm morning and I turned off the CD player. (I had not mentioned the pulsating drone to her before) She looked at me aghast and said ?Oh, that is really unpleasant?. The unpleasant ?silence? in our house can be heard by other people. I spent most of the day out of the house walking in the hills. 28 ? both of us slept badly and woke up tired. Pulsating sound not quite so noticeable this morning. 29 ? Woke up again several times during the night. Depressed, jittery and agitated all day, although the turbines were not moving at all. Slight metallic whine all day. The entries speak for themselves. On re-reading what we?ve been through this year it sounds like someone?s worst nightmare ? and so it has been. The idea that someone, somewhere has made a lot of money by effectively dispossessing us, doesn?t bear thinking about, but it happens all the time, all over the world and the horror is creeping nearer home? This odyssey has filled our lives for a year and we?re now facing the financial consequences. The effort put into research and documenting everything has cost us the energy we needed to become integrated and look for suitable work. One of the reasons I gave up my job in the hotel was that I was simply exhausted and couldn?t ?tank up? [relax & regenerate] at home. Whatever the outcome, we are now being forced to go elsewhere to look for work because it is impossible to concentrate here. The more people know about this, the better. Gail Mair Via Chiesa in Giù 34A 58050 Murci (GR)

Italy

gail.mair@yahoo.it

tel: 0039/0564519208

Answer questions before moving forward

By Wendy Todd

MARS HILL (6th June 2008): This was written as an open letter to the town of Freedom.(USA)

http://waldo.villagesoup.com/opinion/story.cfm?storyID=117542
Dearest Freedom,

I am writing with your town on my heart. You have been through a year of turmoil and grief that I wish you could somehow have avoided.

I understand the desire of some to want the wind turbine project to move forward. You believe it will bring prosperity to parts of the community and that it will help somehow with the problems the world is facing with global warming and the energy crisis.

What I want more than anything is for you to understand what the project will truly bring to the community. I am not judging whether it is right or wrong for Freedom, but there are answers that you need before you move forward. The residents who live the closest to the proposed site have legitimate concerns.

Many in our town opposed the project in Mars Hill, but time and time again the arguments were dismissed. The developer had answers for most of the questions of concern, but other questions were avoided with the suggestion that they would be researched and answered later.

The majority of the town believed the developer and the idea that the Maine Department of Environmental Protection permitting process would protect the people and the environment. We were wrong.

My husband and I were basically ?for? the project. We were cautious, but we felt we had done our homework. The developer and town manager said there wouldn?t be any health concerns or noise related to the project.

We visited a site in Prince Edward Island and were surprised at how little noise was being produced by the huge machines. The project would bring a new tax base to the town and help strengthen our local economy.

Friends, family and neighbours would be benefiting directly from rental agreements with the developer. Local businesses would be benefiting from the huge influx of workers through the construction phase.

The promise of hundreds of local construction jobs brought hope to many. The promise of carbon reduction and green energy made many feel they would be foolish not to support such a wonderful project. We were told the hardest thing to get over would be the visual impact.

There were many things that we didn?t understand. There are many things that we have learned. Please, learn from our mistakes and make a decision that everyone in your town can live with.

Construction started with the clearing of the ridgeline. About 150 acres of trees were clear-cut from the mountain. Some roads already existed to support the communication towers already in place on the ridgeline.

Those roads were added to and upgraded to accept the size of the equipment that

is needed to raise the turbines. Each turbine site has to be level and have enough room (about two acres per site) for the upright tower and the three blades to be laid out on the ground before being lifted into place by the biggest crane many in Maine have ever witnessed.

Blasting had to be done to create some of the turbine sites and to reach needed depths to anchor the 389-foot tall turbines. The blasting scarred the mountain badly and shook many homes. Residents were not warned of the blasting, and for those of us who lived nearby it became a little like a war zone.

Dishes rattled, pictures fell over or swayed on the walls, sheet rock dust fell from the ceilings. Our new home has multiple cracks in the foundation and numerous screw pops and cracks in the sheet rock.

The equipment and turbine components arrived on trucks with the longest truck beds many here have ever seen. Most of these trucks come by way of police escort. Some roads had to be upgraded, straightened or extended to accommodate the turning of these huge trucks.

Disruption to residents nearest the project was great, but even people in town were frustrated by the traffic delays. Once construction of the turbines started, so did the public interest in the project. People came from miles around to drive around the mountain to look at the progress. Many continue to stop in the roadways to look or take pictures.

Residents who grew up here are used to four or five vehicles a day going by; during construction it seemed like a constant stream of traffic, and even now the weekends and pleasant days through the summer bring many curious motorists. The roads did take quite a beating but were resurfaced last fall.

The blasting and construction phase drove most wildlife from the mountain. It was frightening to those of us who live around the mountain who are used to living with wildlife near our homes.

Because it was never talked about, we had no idea what to expect. The summer and fall during construction were the strangest my family (I am third-generation Boyd on this land) has ever seen.

Walks on the mountain on the weekends were silent? no birds, no chipmunks, no squirrels, none of the chatter that a walk in the woods would normally bring. The deer, moose, bear, coyotes, fox, porcupines, skunk, birds, etc., all disappeared. Most are recovering now that the project is up and running. We haven?t seen or heard coyotes or owls return, but are hopeful of a full recovery.

In early December 2006, the first turbine was turned on for the testing phase. Immediately noise was an issue. We called the project manager but he did not return our call.

A week later, a noise expert knocked on the door of my parents' farm and related he was sent by the developer to take readings of noise levels from the site.

He asked me how I felt about the project. I told him that I was concerned about the noise, because we were told in town meetings that there wouldn?t be any. He asked who told me that. I told him the developer and town manager. He asked if I had read his report.

I told him that I didn?t know that there was a report. He said that he had done a study that showed there would be noise from the turbines.

The next day my husband and I started researching the permit and found exactly that. Under the heading of ?Major Noise Impacts? in the permit, there was a report that showed how the turbines would affect the surrounding lands with noise. We were in shock. We felt violated. We couldn?t understand how the people

of Mars Hill could have been so misled at formal town informational meetings.

We continued to dig for information on the turbines and the permitting process. To our shock and dismay, we found others who were dealing with the same things that we were.

Our neighbours starting sharing their stories, and we formed a group to help keep each other updated on new information. The best way that I can describe this process is that it is like being diagnosed with a rare disease that few professionals know little about.

You struggle to find the information that may help you. You look for others who have the same symptoms in a hope that they have found some answers to the disruption in everyday life. You hope the experts will hurry and find a cure before you lose everything near and dear to you. You wonder how you can help to keep it from happening to anyone else.

Most people do not understand the noise issue. Many drive by on a sunny afternoon, stop their car and listen for the horrible sounds that must be coming from the turbines. The gentle swooshing of the blades at the site disappoints them, and then they turn and go home.

How nice it must be to go home and have what you have always had at your home. Our homes are forever changed because of the wind project. Not only has Mars Hill?s beautiful landmark been torn apart, but the noise and visual pollution from turbines make life within a half-mile to the north and east of the mountain very different and difficult for landowners.

People in the Town of Mars Hill, which lies one to two miles from the mountain, can begin to ignore the turbines. For those of us who live the closest, the turbines demand our attention everyday.

We are a winter resource for wind, meaning the highest and most consistent winds blow in the winter months. We are a wind resource 3, which is on the low side of what most developers want with technology as it is right now.

Most of the time the wind blows from the west to the east over the ridgeline that runs north to south. Landowners to the north and east of the ridgeline are considered downwind of the project. Being downwind means the noise from the turbines will be headed in your direction most of the time.

Most residents who live on East Ridge Road to the north of the project are 2,500 feet or less from the turbines. Most residents who live on Mountain Road to the east of the project are 3,200 feet or less from the site. There are only two homes that exist beyond that on either road. Both are about a mile from the project.

All property owners 3,200 feet or less from the site have heard the turbines inside their homes. Those who are closest have been woken up by them and have noise levels inside their homes that make concentrating on anything quite difficult.

Why, you ask? It is the low frequency nature of the noise that penetrates lightweight buildings, unlike other noises that many of us are used to hearing.

The other issue, which is maybe the greatest for many of us, is the repetitive, pulsating nature of the noise being emitted. People describe it as a giant heartbeat, sneakers in a dryer, a ship's propeller underwater, the chug-chug of a freight train, etc. It can be heard and at times it can be felt. It is a bit like rap music. If you have ever pulled up beside a car with teens playing rap, you probably know what I mean when I say that you can feel the bass beat of the music in your chest, head and feet.

Turbine noise at its worst can be a lot like that. There are times that nothing

helps.

You can hear the turbines over the TV, computer games, washing machine and three kids. We go to bed each night with a fan at our head and the windows draped. This noise may be present for a couple of hours or for days on end. The longer a person is subject to the burdensome noise levels, the more symptoms they exhibit.

Sleep deprivation, loss of concentration, anger, frustration, rage, ringing in the ears and headaches all result from turbine noise. Those who suffer from migraines have more and suffer longer because of the pulsating of the turbines.

All of these things lead to high levels of stress, which has translated into sleep aids, anxiety and depression medication for some residents.

One resident has developed a skin condition that her doctor attributes to the stress and frustration over the noise and shadowing of the turbines. One couple has decided not to build their dream home. Three other couples that had dreams of building, on either family land or land that they purchased, don?t know what to do. One family has split? the wife not wanting to go on living beside the turbines while the husband wants to fight for the right to stay on the land where he hoped to live out the remainder of his days.

Many of us toy with the idea of moving but can?t believe that our hopes and dreams of living in such a beautiful place could be destroyed by something as ? benign? as an eco-friendly, CO2-reducing, tax-base-increasing, world-saving wind turbine (all of which we believed and now know to be greatly misleading.)

Just so you have a few numbers at your disposal ? our quiet before the turbines has been found to be between 25 and 30 decibels depending on weather conditions and season.

Ambient levels can be considerably higher depending on weather, season, traffic, insects, etc., but when the winds are calm our quiet was ?deafening.? The mountain acts as a natural fence from winds for us when the winds are blowing west to east. Often the winds are high on the mountain and are little to nonexistent at our homes.

Beginning at around 42 decibels of outside turbine noise, the sound penetrates our home and can be heard inside. We have taken readings as high as 56 decibels of nearly pure turbine noise outside, which relates to around 51-52 decibels of noise inside my house with the windows open, or 45-46 decibels of turbine noise with the windows closed.

What does that sound like? A few examples: The turbine developer described 45 decibels as the sound of songbirds, and 50 decibels as a quiet conversation. When I stand on my front porch, a squirrel in the tree about 30 feet from the house chattering at the cat registers 45-46 decibels.

Today is overcast with a gentle mist in the air, and across the road they are planting potatoes. A John Deere is pulling a disc to prepare the ground, and a huge New Holland is pulling a four-row planter. The road is about 550 feet from the porch, and the field is 15 or 20 feet on the other side of the road.

The two tractors working the field yield 51-53 decibels of equipment noise when they are at the ends of the field farthest from me, and yield 58-63 decibels as they pass each other in the center of the field that is directly across from where I am standing on my porch.

The smaller tractor with the disc puts out 51-53 decibels when it goes by alone, the bigger tractor when it goes by alone puts out 57-61 decibels when it goes by. When I go inside and close the door, the noise from the tractors all but disappears.

It?s not like that with turbine noise. Turbine noise penetrates everything. Last winter I stood at the IGA on Main Street in Mars Hill very early in the morning. There were three tractor-trailer trucks idling at the truck stop. Two of the three had refrigerated trailers. The noise from these units was right around 56 decibels. How would you feel about having three tractor-trailer trucks idling in your yard any time of the day or night? How would you feel about having songbirds or two people carrying on a conversation in your bedroom at 2 a.m.?

The next time you are listening to birds outside, think for a minute? what kind and size of birds are they, how far away are they, how many are there, are they happy or territorial? think of all the things that affect what you hear when you hear a bird's song.

Turbine noise can range from barely audible to a gentle whooshing, to a high range jet overhead, to a number of jets overhead, to a wailing thumping beast that you can?t escape.

What everyone needs to understand is there are many things that affect turbine noise, and a couple of visits to a turbine facility are not going to give you a good idea of what to expect. We made the same mistake. We should have spoken to people who live beside the project, not the people who run the project. It is a horrible thing to lose the peace and quiet of the land that was ours for generations but it is completely unacceptable to lose the peace and tranquility of our home.

The size of the turbines (GE 1.5 megawatt, 389 feet tall) is definitely something to attempt to get used to, but what the pictures don?t show is when the wind blows they are in perpetual motion, twirling and whirling.

Shadowing of the land and homes occurs in the morning and evening when the suns rays cast shadows from the moving blades onto the surrounding grounds up to a mile or better away.

That movement, as well as the shadowing, has been the subject of some medical studies that are trying to prove the motion puts children and adults who suffer from seizures at risk. Autism and epilepsy are near the top of the list.

For those of us who do not suffer from those disorders, the loss of visual peace has been hard to accept. I hang curtains ?just so? in the windows to block the site of the turbines but still be able to see some of my backyard. If you don?t, the only thing you can see are the turbines. Your eyes are drawn to the movement of the blades and all else, no matter how beautiful, can?t compete.

We fear our properties are no longer worth what they were. If we don?t want to continue living here and it was the dream of a lifetime for many of us, who will be willing to buy our homes for what they were worth before the turbines?

Disclosure laws dictate we have to tell the truth to a potential buyer or we are held accountable. How many people would buy your house if you had almost 400-foot-tall, spinning noisemakers in your backyard that disrupted sleep patterns and could potentially cause headaches and a number of other disruptions to normal daily patterns and routines?

There is no firm documentation on the effects of a turbine project on land values that we can find. The only black-and-white document that we have found is one that shows a lawsuit that was filed by a new property owner claiming the seller did not disclose the potential risks of the wind farm. The seller had to pay the new owner 20 percent of the purchase price.

Developers say it doesn?t affect property values ? some even say it increases property values. You need to reason that one out for yourself.

The political side to wind turbines for me is better left untouched. The government subsidies, green credits and whatever else make it lucrative to the

developer I just can?t seem to wrap my mind around.

So do some research and decide for yourself. Carbon reductions are minimal for the Mars Hill site because they are not offsetting a carbon-producing plant. A friend who works at Maine Public Service stated the wood-burning plants in Fort Fairfield and Ashland continue to operate the same as they always have. So do the plants from Canada that we call on when we need more power than the two wood-burning plants can provide.

The Mars Hill facility will sell green credits to carbon-producing plants elsewhere, but that doesn?t reduce carbon emissions, it just offsets them. The numbers they give are numbers only until they are backed with proof that they have shut down or mothballed a carbon-producing plant. That information will be different for each wind facility depending on its proximity to a carbon-producing plant and how much it can offset the operation of that plant.

When the wind doesn?t blow, there has to be something to back it up and take over production of electricity until the wind picks back up again. Here in Mars Hill days go by when the turbines don?t turn at all for lack of wind. Thank goodness the old supply is still the reliable supply.

Understand that wind turbines are only between 17 and 40 percent efficient, depending on the wind resource. The GE 1.5 megawatt turbines that are here need to be spinning between 16 and 18 revolutions per minute before the turbine kicks on and produces electricity that can be sent into the grid. That means that when you drive by and the turbines are rotating at a quiet, almost serene, 10 to 12 rotations per minute, they are not producing power. That information comes directly from one of the chief engineers for GE who visits here and has been more helpful than the developer or the town.

As for all those construction jobs, most went to construction companies in the southern part of the state because they were the only crews large enough, with the proper equipment and training to complete this huge job.

Some local crews were used for building the maintenance/office structure, landscaping, security and plowing of roads in the winter. Local businesses were used and did benefit from the construction phase. (Cement, cement forms, electrical, construction materials, local restaurants, local hotels, etc.)

Town officials and others rented property, worked for, leased land to and profited from the developer. Many in town felt that town officials should not have profited as they did from the development because of their involvement with the approval phase. Many relationships have been hurt and severed in this community over the turbines.

There was never a vote or poll taken to get a firm understanding about how the people of Mars Hill felt about the project. The planning board and the town council, who believed everything the developer told them, decided to go ahead with the project.

They never bothered to read the permit to see if there were any discrepancies nor did they do any thorough research on their own to determine the truth.

The \$500,000 TIF agreement sounds great, but because of the increase in tax base, our local schools will lose about \$249,000 in school funding from the state. That will need to be made up by the town. The reduction in mill rate for the town from 24 to 20 mills is expected to be lost within the next couple of years, partly because of the school funding issues.

Mistakes were made. The town manager attests to that, but most of the problems are left for those of us who live the closest. We have asked for help from the developer, the town and the Maine DEP, but none has come. We have been asked to be patient while the developer and the DEP figure out through testing what the noise levels are and what they can do about them, if anything.

We are saddened there seems to be no one who is willing to help the people of Mars Hill who are being so negatively impacted by this project. We are saddened the state isn?t doing more to protect future projects from the same fate as ours.

We hope other communities will listen to our warnings and develop ordinances and laws to protect themselves from the truth about wind turbines. Proper setbacks remove most of the negative impacts, but setbacks need to be measured in a mile or better to be successful in the areas of noise and shadowing. Disruption to TV, cell phones and Internet services were experienced in Mars Hill because of the project.

The risk of turbine collapse, blade throw, ice throw and fire can be reduced with proper setbacks. Manufacturers normally recommend one to two times the height of the turbine. In my opinion that is nowhere near far enough if you watch the video of the turbine that basically blew up and collapsed in Denmark.

The developers would like for you to believe those things don?t happen, but they do. A man was killed last year in Oregon while he and two others were working on a new turbine when it collapsed. Developers do not always follow recommendations of the manufacturer. In Mars Hill, Turbine No. 1 sits so close to East Ridge Road that a turbine collapse could be catastrophic.

If you think the developer and the permitting process will protect public health and safety, property values or how you live in your home, you will be greatly disappointed. You need to understand the reality of turbines and develop local laws and/or ordinances that will protect the citizens of your community.

Yes, people should have the right to do what they want on their property but it should not do harm or rob their neighbour of the right to enjoy their property.

People who understand the risks and choose to accept them should have the right to sign an easement, but no one should be forced to live with an industrial wind turbine site in their back yard. They can be dangerous and are torturous to those who live as close as some of the people do in Mars Hill.

If you have questions, please visit or talk to one of the families that live close to the project in Mars Hill. They are the ones living it day to day and will be truthful about the reality of industrial wind turbine sites and the effects on the surrounding lands. If you want help with contact information for the other families you can reach me at mtntodds@pwless.net.

Please, use caution as you decide what is best for your town. Remember to treat each other with respect. Each side is fighting for what they believe is their right. I know if the Town of Mars Hill had understood everything about the project that it would be different than it is today. What if it was your property and your home that were going to be affected? Most people don?t think about it until it happens to them. I know I didn?t.