Melton DRAFT local plan consultation

Objection to policy EN 10

19 December 2016

We both became members of Belvoir Locals Oppose Turbines (BLOT), when BLOT was formed in 2007 to resist plans for a wind farm in the Vale of Belvoir. BLOT has been a Rule 6 party at two significant Windfarm Public Inquiries as well as submitting evidence and objections for single wind turbine applications.

Originally we and many local people had serious concerns over the environmental impact of the wind turbines on communities, homes, heritage and landscape.

In addition to the experience gained during these planning applications, we have kept abreast of the latest research and developments relating to wind turbines and planning.

1.4.1
We note the Local Plan is claimed to be based on robust evidence. This is repeated at 1.14.1 where it says;
Local Plans must be based on robust evidence.

Policy EN10 is in conflict with this requirement.

3.3.2 BLOT wholeheartedly supports the objectives of the Melton Borough Sustainable Communities Strategy, which includes to:
Improve the health and well-being of local people

Policy EN10 is in conflict with this requirement.

7.19.2
"*The planning For Climate Change Study*" is cited together with ' *recent planning applications* '. This 2008 study is now over eight years old, its information is outdated and cannot be considered robust evidence to support the Local Plan.

The planning applications referred to only came forward due to the substantial financial subsidies from FiT and ROCs (subsidies which are

transient and unsustainable such as the early removal of ROC subsidy). The Local Plan fails to make any mention of the significant public objections to the vast majority of wind turbine planning applications within Melton Borough. The plan has not taken account of informed public opinion on this matter.

7.20.2
The example of Hockerton wind turbine in Nottinghamshire is cited as only a positive example without providing any balance or proper evidence. This Wind turbine income is gained by substantial subsidy from the feed in tariff FIT, which must be paid for by all domestic and industrial electricity consumers. The feed-in tariff income "enjoyed" by the Hockerton is a substantial 4 times over and above normal market rates for electricity. Therefore a typical electricity wholesale price of a £45/hour for a megawatt will be costing £212/hour MW due to this subsidy alone. To support such an income rate inevitably means more people in fuel poverty, which runs completely contrary to the aims of the Local Plan.

7.20.4
As stated above, the ratepayers of Melton have made significant and strenuous objections to the majority of the wind turbine planning Applications in the Borough. This has included the local population funding the substantial cost of legal Representation. The authority must at least acknowledge this fact within the Plan.

Irrespective of alleged "demand", the authority has no requirement to open up the majority of the Borough as suitable in principle for wind development.

7.20.5 The Plan notes wind turbines can impact landscape, heritage and local people. The authority has evidence of these adverse impacts but has chosen not to include them in the local plan.

7.20.7
The Local Plan states that developments will be managed to ensure that adverse impacts are addressed. However this is incorrect as The Local Plan does not address all the adverse impacts from wind energy.

Moreover as written The Local Plan cannot address all the adverse impact wind energy.

7.20.11
The Melton LSS landscape sensitivity study has shown how it has interpreted single turbines, however we find the term "cluster" has not been precisely or clearly defined at all in the study, and is therefore open to misinterpretation and manipulation.

A dictionary definition of cluster is a; "A group of similar things **positioned or occurring closely together**". (our emphasis)

The LSS landscape sensitivity study gives no base example of a spatial layout of wind turbine cluster or importantly what the authors of the study considered to be a cluster which they have then used to inform the conclusions of the study.

For wind turbines to operate efficiently they require significant spacing to avoid inflow turbulence, noise and power reduction (which has shown not to be understood in the LSS). It is reasonably foreseeable that spacing of at least 10 times rotor diameter will be put forward by the developers, who could then claim to be a single cluster of 2 or 3 turbines. From existing locally consented wind turbine rotor sizes, this would require turbine spacing of 100 m to 540 m, allowing three turbines to spread over 1.5km. This is hardly "positioned closely together" as reasonably defined by the word cluster.

As the Landscape Sensitivity Study provides no clear or robust information on what the author considers the size/spacing of a cluster, there is no robust or reliable guidance for wind turbine clusters in this study.

The absence of a robust methodology evidence for wind turbine cluster size results in the guidance being wholly inadequate for a long-term Local Plan. As the plan stands, the absence of precise direction for clusters of wind turbine would make it impossible to coherently manage planning applications with multiple wind turbines.

7.20.14
It is stated The Melton and Rushcliffe landscaped sensitivity study 2014 should inform the layout and design of wind turbine proposals.

We have deep misgivings that a significant area of Melton Borough may be deemed "suitable in principle" for wind turbine applications by use of this study.

As explained above we find the term cluster is not adequately or clearly defined in the study and therefore open to deliberate misinterpretation and manipulation by developers.

7.20.15
Policy EN 10 - Energy Generation from Renewable Sources is a list of factors which must be taken into account in development proposals.

The list is very basic and open to interpretation and manipulation by unscrupulous developers.

Local people have been seriously concerned that their landscape, heritage and communities will be blighted by wind turbine developments which **provide no benefit to those residents adversely impacted.**

This draft local plan provides no mitigation to those real concerns.

We are extremely concerned The Local Plan has not provided clear protection for Melton Borough residents from wind turbine development.

The Local Plan relies on the IT Power survey (2008), which considers a conservative (i.e. safe) separation from wind turbine development to be 400m. The wealth of evidence which has become available since 2008 clearly shows a nominal 400 m separation between wind turbine and a home is totally inadequate.

Melton Borough Council specially commissioned a noise monitoring survey of the small wind turbine at Sproxton, following noise complaints from residents. The report from a reputable acoustic consultant (SproxWT131210) in December 2013 stated:

1.5 It is concluded that the noise from the Sproxton Wind Turbine generates a highly disruptive and intrusive level of noise impact. This occurs not because of the decibel level but due to its nature and character. The noise cannot be easily avoided or habituated to. These factors combined with the frequent occurrence of turbine noise, often for prolonged periods, results in a significant and substantial adverse noise impact.

Given this is a small 50 kW wind turbine, in this report it records; ***The nearest complainants are approximately 420m from the turbine.*** The IT power survey considered 400 m between wind turbine and homes to be a generous allowance. This clearly shows such a separation distance to be dangerously inadequate.

Therefore Melton Borough Council has clear evidence of significant and substantial adverse noise impact beyond 400 m from what can only be described as a small wind turbine. We understand this noise impact is still continuing.

In addition in 2015 Mr David Davis MP Stated in Parliament;,
In the last five years no planning application was refused on noise-related grounds, but there have been 600 noise-related incidents arising from wind farm operations. The majority of complaints arise as a result of amplitude modulation, which is the loud, continuous thumping or swishing noise regularly described by those living near wind farms.

Numerous studies have identified that sleep is disturbed on a regular basis even at distances over 1 km away from turbines, yet under the ETSU standards turbines can be installed just 600 metres away from residential property. The wind farm companies are acutely aware of this, and all the more so since a member of the public, Jane Davis, sued a wind farm near her

home for noise nuisance. The matter was settled out of court, and there is a gagging order preventing us from knowing the details, but the settlement is rumoured to have been in the region of £2 million.

The out-of-court settlement with gagging clauses mentioned above was only offered the day before noise recordings made at the Davis home were due to be reproduced as evidence for the judge at the National Physical Laboratory.

When BLOT was formed in 2007, the claims made by developers were;

1. you will not hear the wind turbines
2. amplitude modulation does not exist (or is extremely rare)
3. low frequency noise does not come from modern wind turbines, or has no effect on neighbours.

Since then, the first 2 claims made by developers have been proved to be false. The third claim concerning low frequency noise is also made without any robust evidence.

In 2015 The Independent Noise Working Group (INWG), submitted a comprehensive analysis and critique of the existing noise regulation of wind turbines.

Their very serious recommendations are as follows

Quote (INWG. Work Package 10 full document attached)

Summary of Recommendations to Government Ministers

• Based on the findings at WP2.1, WP3.2 and WP5, a first step towards protecting communities from wind turbine noise amplitude modulation would be to replace the use of ETSU6 as recommended by the Northern Ireland Assembly report14, January 2015. ETSU should be replaced with a procedure based on the principles of BS4142: 2014. This will bring wind turbine noise assessment into line with other industrial noise controls. New guidance of this type should be formulated in a Code of Practice that sets out a BS4142: 2014 type methodology that reflects noise character and relates impact to the actual background noise level and not an artificial average.

• Based on the findings in WP6.1, experience at Cotton Farm described at WP6.2 and elsewhere, it is recommended that an effective AM planning condition should be part of every wind turbine planning approval unless there is clear evidence it is not needed. It is recommended that:

1. Where wind turbine noise level and character require simultaneous assessment then BS4142:2014 should be used. The rated wind farm noise level should not exceed +10dB above the background noise level.
2. Where only wind turbine noise AM requires assessment then a Den Brook type planning condition should be used.

• Continuous noise monitoring of wind turbines should become a standard planning condition for all wind turbine planning approvals as recommended in the Northern Ireland Assembly report14, January 2015. This should be funded by the wind turbine operator but controlled by the LPA with the noise data made openly available to ensure transparency. The Cotton Farm community noise monitor described at WP9 provides an example of how this can be achieved.

• There is a need to commission independent research to measure and determine the impact of low-frequency noise on those residents living in close proximity to individual turbines and wind farms as recommended in the Northern Ireland Assembly report14, January 2015.

• The government should deal decisively with the ethical issues surrounding the Institute of Acoustics wind turbine noise working groups described in WP8. Government departments should disassociate themselves from the IoA until conflict of interest and ethics issues are resolved and full transparency is restored.

Specifically in regards to low frequency wind turbine noise we have reproduced a wind turbine noise spectrum graph from INWG Work Package 1: The Fundamentals of Amplitude Modulation of Wind Turbine Noise; Author: John V Yelland MA DPhil (Oxon) MInstP FIET AMASA MIOA.
(INWG. Work Package 1 full document attached)

This official test analysis below in Figure 2 unusually includes wind turbine low frequency noise measurements down to 1 Hz

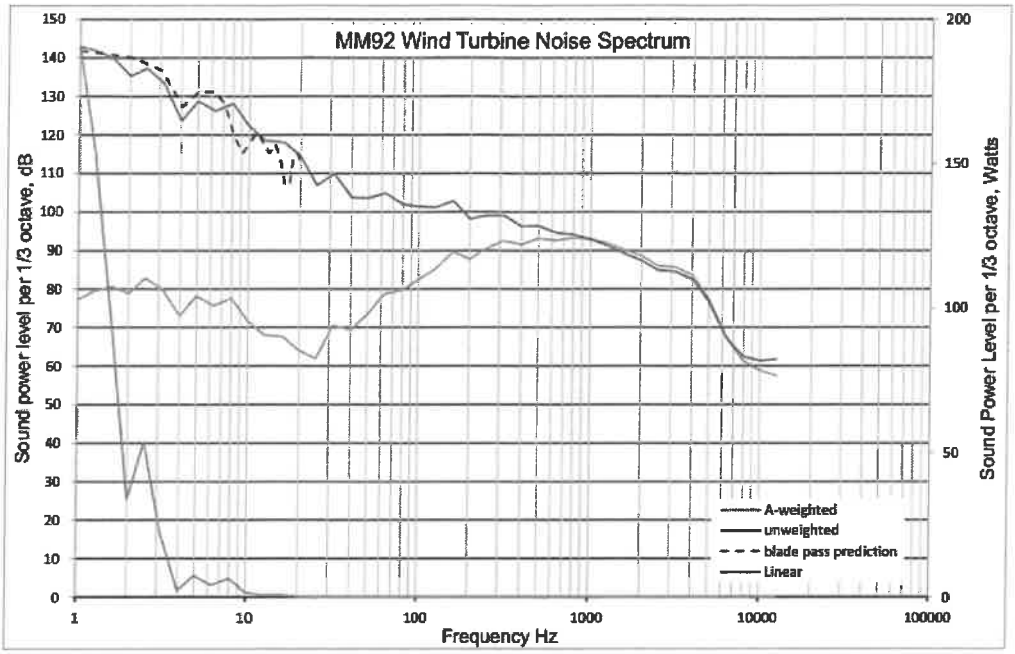

Figure 2: Noise emission power data to IEC 61400-11 from measurements on a RePower MM92 wind turbine, 1 Hz to 12.5 kHz, by Windtest gmbh.

Mr Yelland notes;

The essential point to grasp is just how much power, rather than how much perceived loudness, is in the 1 - 20 Hz frequency band compared with that in the 20 Hz to 12,500 Hz frequency band; to illustrate this the linear green trace is plotted on the linear scale to the right of the chart. The answers are 99.94% and 0.06% respectively, of a total of 572 W. The total noise power below 20 Hz is. Irrespective of the mounting evidence of damage to both human and non human species, the magnitude of this ratio, 1,726, suggests that it is most unwise to ignore the existence of the acoustic energy below 20 Hz just because that frequency defines a nominal lower limit of human hearing.

We contend the use of A-weighted decibel scale prevents the complete noise impact from wind turbines being assessed properly.

Environmental health officers would correctly be alarmed if they are asked only consider soot emissions from boilers and ignore invisible carbon monoxide. In respect of wind turbine noise they are in practice asked to ignore noise emissions below 20 Hz, despite the overwhelming majority of power emissions being below this figure (see figure 2 above).

This graph clearly supports comments made by Melton residents at public meetings in the Vale of Belvoir such as Long Clawson, where they have stated to have adversely perceived, sensed and felt emissions from wind turbines.

Wind turbine developers have repeatedly wanted developments to be considered on an individual basis. We contend that individuals nearby to such developments should be also be considered individually in respect to noise.

At the Somerby planning appeal for a wind turbine (MBC ref 13/00540/FUL APP/Y2430/A/14/2221470), Melton's updated appeal statement used evidence given by Dr Christopher D Hanning BSc MRCS.MRCP MB BS.FRCA MD Honorary Consultant in Sleep Medicine, University Hospitals of Leicester. It is reasonable to conclude Melton consider Dr Hanning to be a credible expert witness.

Dr Hanning is part of the INWG and is the author of;
Work Package 3.2 - EAM, Wind Turbine Noise, Sleep and Health
INWG. Work Package 3.2 full document attached as evidence
Dr Christopher Hanning states; *Approximately 15% of the population are noise sensitive and have both a lowered annoyance level and an enhanced cortisol response, a physiological marker of stress.*

For Melton Borough the 15% equates to a very considerable 7,556 residents. Elsewhere in the Local Plan such a figure is deemed a significant percentage.

Furthermore he writes;
It is often implied that those who are highly annoyed by noise, including wind turbine noise, are motivated simply by a dislike of the noise source or are psychologically disturbed in some way. This is simply not the case, the response of the noise sensitive being as normal a reaction as that of the noise tolerant.

Work package 3.2 is provided as an attachment.

The Northern Ireland Assembly Committee for the Environment Inquiry into Wind Energy in 2015 concluded;
'...it seems apparent that the current guidelines in respect of permissible levels of noise are no longer adequate and that the research evidence available has increased significantly since 1997. The committee therefore recommends that the Department ***should review the use of the Etsu-R-97 guidelines on an urgent basis, with a view to adopting more modern and robust guidance for measurement of wind turbine noise***... (our bold)

'The committee is also concerned that there does not appear to be continuous long-term monitoring of noise from wind farms, either by developers or by the relevant public sector organisations. If such information were available it would introduce an objective measure of the noise output of turbines, as opposed to the projected noise impact produced by a desk-top exercise as part of the application process.

The Melton Local Plan allows for the deployment of wind turbines within the borough,

The evidence provided here shows a statistically significant percentage of the Melton Borough population to be at risk from adverse wind turbine noise emissions. Many of whom have clearly rejected previous wind turbine planning applications.

There is now overwhelming evidence of significant adverse impacts on residents living adjacent to wind turbines. Just recently in December 2016 an Irish High Court Case (Shivnen & Ors-V-Enercon Wind Farm Serves Ltd & Anor 2011/9955 P.) has resulted in turbine manufacturer Enercon accepting full liability for causing nuisance to seven families who live up to 1km from the wind farm. (Nuisance being a somewhat dry term for home abandonment due to noise from wind turbines.) The case will return to the High Court in March 2017 to discuss punitive damages.

The inclusion of wind turbine development within the Local Plan without providing a reasonable level of protection for residents is in conflict with the aspirations of the Local Plan.

It is reasonably foreseeable that if the Local Plan EN10 does not specifically provide reasonable or adequate noise protection for residents from wind turbines, the authority could find itself liable to significant financial costs.

We are willing to clarify and answer questions on any points within this document either by e-mail or in person.

References

** attached with this objection

Other work packages can be found at
https://www.heatonharris.com/reports-publications

Work Package	Work Package Subject	Lead Author
1 **	Fundamentals of AM	John Yelland
2.1	Literature review	Richard Cox
2.2	AM Evidence review	Sarah Large
3.1	LPA Survey	Trevor Sherman
3.2 **	Health effects	Chris Hanning
4	Den Brook	Mike Hulme
5	Towards a draft AM condition	Sarah Large

6.1	Legal remedies	Richard Cowen
6.1A	Legal remedies - Supplement	Richard Cowen
6.2	Community experience of SN	Bev Gray
7	Test of the IoA AMWG methodologies	Sarah Large
8	Review of IoA AM study and methodology	Richard Cox
9	The Cotton Farm monitor experience	Bev Gray
10 **	Study summary	Richard Cox