

Notes of the Meeting

Noise Working Group (NWG)

**DTI, 1 Victoria Street
2 August 2006**

Present: Alan Smith (DTI)
Jonathan Perks (FES)
Mark Dorrington (FES)
Helen Matthews (DEFRA)
Richard Perkins (DEFRA)
Andy McKenzie (Hayes McKenzie Partnership Ltd)
Bob Davies (RD Associates)
Dick Bowdler (New Acoustics)
Geoff Leventhall (Consultant)
Marcus Trinick (Bond Pearce)
Mark Jiggins (Hoare Lea Acoustics)
Andrew Bullmore (Hoare Lea Acoustics)
Mike Anderson (RES)

Apologies: Alan Purdue (Castle Morpeth LA)
Bernard Berry (Consultant)
David Spode (Shrewsbury LA)
Huw Thomas (Anglesey LA)
Jeremy Bass (RES)
John Warren (nPower)
Malcolm Hayes (Hayes McKenzie Partnership Ltd)
Mark Legerton (nPower)
Mike Raw (Scottish Borders LA)
Philip King (RES)

Introduction by Chair

Alan Smith welcomed those present. Alan briefed the Noise Working Group (NWG) on the background for calling the meeting and highlighted DTI's objectives for the NWG which is to provide clear expert advice and guidance on the issue surrounding Amplitude Modulation of Aerodynamic Noise (AM) raised in the Hayes McKenzie report on Low Frequency Noise (The Measurement of Low Frequency Noise at Three UK Wind Farms, W/45/00656/00/00, URN No. 06/1412).

Alan emphasised that the role of the NWG was not to review ETSU-R-97 but to undertake a peer review of the Hayes McKenzie report.

Terms of Reference for the NWG

The NWG will address issues specifically relating to the Hayes McKenzie report:

- Consider and agree, if thought appropriate, the main conclusions of the report

- Consider the report's findings relating to AM
- If appropriate, provide a means to assess and apply a correction where AM is predicted to be a clearly audible feature
- Make clear recommendations, which will assist planning authorities. These recommendations will provide clarity and minimise any confusion when assessing applications

It is intended to complete this review and publish its recommendations during Autumn 2006.

Review of the Hayes McKenzie Report

In line with the 'Terms of Reference' the main conclusions of the report were discussed in detail. In summary it became evident that a greater understanding of the effects and causes relating to AM were required to ensure that this phenomenon is dealt with in a clear and impartial manner.

It was agreed by the NWG that an understanding of the causes of AM should be developed. A pragmatic and staged approach would be appropriate, the first stage being to gather empirical data from existing developments. It was agreed that the NWG should commission a study to gather empirical data from existing sites to better understand the extent of the AM issues. This study should be undertaken as soon as possible, but it was recognised that funding had to be secured. The study would incorporate the following tasks:

1a	Literature study to review the current knowledge of AM
1b	Identify potential sites which could be used to carry out objective noise measurements Maximum of 10 sites (including 5 where there had been complaints). This would include: <ul style="list-style-type: none"> • Asking LPAs for information on which sites they had received complaints concerning noise • Identifying control sites (where there had been no complaints) • Developing a methodology for carrying out noise measurements
1c	Contact <ul style="list-style-type: none"> • turbine manufacturers to find out what their understanding of AM is and what work they are doing to address this issue • windfarm developers to see whether they have any historical data which would help determine the circumstance when AM occurs Report findings back to DTI / DEFRA / NWG
2	Carry out objective noise tests as defined in 1b It was agreed that it would be sufficient to perform these measurements outside of buildings; this would considerably reduce the difficulties of obtaining permissions and access
3	Analyse results This will include the quantification of AM as well as the frequency and length of time AM is found to occur at each site
4	Make recommendations if required Report findings back to DTI / DEFRA / NWG

A very rough estimation was that this study would take up to 12 months, but at this time no start date could be guaranteed. DTI and DEFRA agreed to investigate how this study could be supported.

Recommendations / Review of Actions

The work recommended above would provide a foundation for clearly identifying and understanding the extent of the AM noise. In the meantime it was agreed that the advice should be given to all stakeholders involved in windfarm development including LPAs regarding future developments:

- In a few isolated cases, and on relatively few occasions it has been observed that AM can increase above the 'normal' level, but the cause (which may be a result of one of more site specific features) is currently not understood and therefore when and where it occurs cannot be predicted
- For future windfarm developments, developers may wish to allow some margin to allow for the noise created by this effect or consider measures to mitigate such a noise should it be found to occur
- Research will be commissioned to further understand the issues surrounding AM
- Existing developments (which have or are seeking consent) must be unaffected by this advice

DTI will prepare a statement, based on the recommendations described above, to send to appropriate organisations and individuals.

Any Other Business

There was no other business.

Date of Next Meeting

To be agreed.

Future Energy Solutions
3 August 2006