



www.stopgrangefarmwindfarm.com

email: info@stopgrangefarmwindfarm.com

ETSU – The Developer’s Friend

No issue causes more concern to prospective and actual neighbours of wind farms, to wind power developers, and to decision makers in the planning system than that of noise. The impact of noise from existing wind farms has given rise to a flood of complaints most of which have not been satisfactorily resolved. This has given rise to an upsurge in reporting on the inability of the planning system to ensure that noise emissions from wind farms are at levels which will generally be acceptable to neighbours and which will avoid complaints in the future.

The problem stems from the adoption of the sixteen year old guidance document which is used in the United Kingdom for setting wind farm noise limits at neighbouring properties namely “*The Assessment and Rating of Noise from Wind Farms*”, commonly known by its reference number, ETSU-R-97. Unfortunately, ETSU-R-97 contains errors and omissions which limit its utility for noise assessment and renders it unfit for purpose. These failings are numerous and include such fundamental flaws such as a lack of clarity on permitted noise levels at nearby dwellings and a failure to address infrasound and noise patterns resulting from amplitude modulation. The methodology adopted for the measurement and assessment of noise is unsound and is based on a number of unsubstantiated assertions.

As a result of pressure from groups including acoustic specialists, planning authorities, campaigners and media reports DECC commissioned The Institute of Acoustics to set up a working group to produce good practice guidance on the application of ETSU-R-97 to the assessment of noise from proposed and existing wind farms. The objective is to ensure that such assessments are carried out in a thorough and, as far as possible, consistent way and that the reports on these assessments provide all the necessary information to a reviewer or decision maker such as the Local Planning Authority or the Secretary of State.

Notably the working group panel comprises mainly consultants who have a vested interest in the industry. For a document that has such far reaching implications it is imperative that the panel should comprise specialists who are totally independent of the industry with no vested interests.

Furthermore the remit is misguided. There are inherent problems from the outset, including the fact that the indicative noise limits suggested in ETSU-R-97 may not be questioned. Furthermore, the character of turbine noise is also off limits and the actual environmental impacts of the noise standards in terms of audibility and likelihood of complaints are not addressed.

Last July the working group published the discussion document “A good Practice Guide to the Application of ETSU-R-97 for Wind Turbine Noise Assessment” for consultation. The guidance diverges from ETSU-R-97 in a number of key areas resulting in a reduction in protection from noise for wind farm neighbours. A number of experts in the field have severely criticised the new document and conclude that rather than creating more robust guidance for planning authorities the guidance is weakened in a number of areas. Some of these deficiencies are listed below.

- The advice given is often vague and inconclusive
- There is no requirement for a noise assessment such that the actual environmental effects can be understood in any meaningful way and for a developer to describe the likely impacts of the noise in the context of the existing soundscape



www.stopgrangefarmwindfarm.com

email: info@stopgrangefarmwindfarm.com

- The terms of reference prevent discussion on noise limits and consequently guidance from the World Health Authority and others institutions is not addressed. In practice this allows noise levels to be in excess of limits recommended by WHO and accepted by most countries
- Clear recommendations are required as to how developers might be expected to engage with surrounding residents
- The method of baseline noise measurement is vague and could lead to significant errors in the assessment of noise. A more robust methodology is required
- Good practice methods for the prediction of non typical background noise such as amplitude modulation and infrasound are not addressed but will be kept under review as part of the consultation. This is not acceptable
- The effects of wind shear conditions during the survey period are understated with no account taken of available evidence
- There is no requirement to undertake background measurements more than one time in a year. There is clear evidence that there can be substantial variation between summer and winter
- The document fails to require the developer to make available the raw background noise, turbine noise and wind speed data. Without this data it is impossible for residents, or an acoustic expert acting on their behalf, to test claims made by the developer

It is evident that most complaints relating to wind farms can be attributed to ETSU-R-97 being unfit for purpose. The document is fundamentally flawed and as a consequence there is an unacceptable risk to the health and wellbeing of people living nearby. Until a revised document which fully addresses the limitations of ETSU-R-97 is available it is entirely reasonable for planning authorities to require separation distances currently applying in Scotland and many countries in mainland Europe. It is important that new or revised documentation is prepared by an independent panel comprising experts who can demonstrate not to have interests vested in the wind turbine industry.