

Welsh Government Written Response to the Report of the Petitions Committee: Control of Noise from Wind Turbines

Executive Summary

Energy policy

Our energy system underpins our entire way of life. That system is now undergoing profound change as we adapt it to meet a range of environmental, economic and social objectives. These changes, outlined in our policy document, *Energy Wales: A Low Carbon Transition*, mean that we expect our energy system to:

- Become increasingly decarbonised – the European Council reconfirmed in February 2011 the European Union’s objective of reducing greenhouse gas emissions by 80-95% by 2050 compared to 1990, with a consequent impact on increasing low carbon electricity generation;
- Meet other environmental standards such as those for pollutants and waste;
- Provide energy security and resilience; and
- Deliver, through energy markets, affordability and a credible framework for long term investment.

We are therefore undertaking a whole system transition to low carbon energy – covering electricity, heating and transport – which amounts to a revolution in the way we meet and manage our energy needs. These changes are already happening and whilst energy policy is not a devolved matter, a large number of key enabling policies are – including economic development, housing, planning, environmental regulation, pollution and transport.

In Wales, 62% of renewable generation stems from sources such as wind and solar with a further 25% coming from thermal renewable generation and 13% from hydro generation. Current operational wind farms have a capacity of 562MW. Significant developments such as Gwynt y Môr, due to come on stream next year, will see capacity increase by 576MW from offshore, with a further 263MW from onshore developments.

Planning for renewable energy

Welsh Government planning policy for renewable energy is contained in *Planning Policy Wales* and *TAN8*. Our policy states that well designed wind farms should be located so that increases in ambient noise levels around noise-sensitive developments are kept to acceptable levels with relation to existing background noise. This will normally be achieved through good design of the turbines and through allowing sufficient distance between the turbines and any existing noise-sensitive development. Noise levels from

turbines are generally low and, under most operating conditions, it is likely that turbine noise would be completely masked by wind-generated background noise.

The report “The Assessment and Rating of Noise from Wind Farms” (ETSU-R-97), describes a framework for the measurement of wind farm noise and gives indicative noise levels calculated to offer a reasonable degree of protection to wind farm neighbours, without placing unreasonable restrictions on wind farm development or adding unduly to the costs and administrative burdens on wind farm developers or planning authorities.

Separation Distances

Welsh Government guidance in respect of separation distances contained in TAN 8 relates to methodological guidance for local planning authorities in refining the boundaries of Strategic Search Areas and remains unchanged. In this context TAN 8 states that "500m is currently considered a typical separation distance between a wind turbine and residential property to avoid unacceptable noise impacts, however when applied in a rigid manner it can lead to conservative results and so some flexibility is advised", we would therefore expect separation distances to be determined locally based upon the rigorous assessment of local impacts. The Welsh Government expects decisions on planning applications to respect Welsh planning policy as set out in Planning Policy Wales (PPW) and TAN 8: Renewable Energy.

The Welsh Government believes that a rigid minimum separation distance could unnecessarily hinder the development of renewable energy projects in Wales. We have taken the consistent view that the issue of separation distances between residential premises and wind turbines is best determined locally on a case-by-case basis, taking on board locally sensitive issues such as topography, local wind speeds and directions as well as the important considerations of visual and cumulative impacts.

Hayes Mckenzie report on wind turbine noise

The Welsh and UK governments are keen to ensure planning authorities and developers are clear on best practice, to provide greater certainty and consistency within the planning system. Following concerns raised with government about the consistency of approaches taken to the practical application of ETSU-R-97, the Government commissioned consultants Hayes Mckenzie to carry out a research project to analyse matters arising in the consideration of noise impacts when determining wind farm planning applications in England.

The review has highlighted the problems faced by local planning authorities dealing with noise assessments for wind farm sites, both in terms of the way the documents are structured, and in the variations in the way some factors are taken into account in the assessments. This suggests best practice

guidance is required to confirm and, where necessary, clarify and add to the way ETSU-R-97 should be implemented in practice.

The Hayes McKenzie report was concerned with analysing whether noise assessments were carried out consistently rather than with making and assessment of ETSU-R-97 itself. The Welsh Government continues to support ETSU-R-97. Current methods used in practice to implement the ETSU-R-97 guidance continue to apply until supplementary best practice guidance is published.

The Institute of Acoustics is taking forward work to develop good practice guidance and the Welsh Government is represented on this committee. The Institute of Acoustics expect to issue a draft for consultation in early summer 2012.

Responses to individual recommendations

Recommendation 1. *The Committee recommends that the Welsh Government should amend Statutory Planning Guidance to introduce buffer zones that maintain the current 500 metres minimum distance between dwellings and turbines, and increase the separation distance as appropriate, and in specified circumstances up to 1500 metres, according to environmental factors such as the topography and the ambient noise levels of the area.*

Response: Reject

There are technical issues which mean we are unable to accept this recommendation.

The Welsh Government's Planning Policy and Guidance is not *statutory* and as a consequence we are unable to accept this recommendation to secure the effect desired by the Committee.

Also, it is not the case that there is a standard, fixed 500m separation distance required between dwellings and turbines. The guidance contained in Annex D to TAN 8 was offered to assist local planning authorities refine the boundaries of the Strategic Search Areas and not individual turbines; and it recognises that even within the context of the SSA boundaries, such a threshold should be applied flexibly.

The noise impacts of wind turbines depend on a wide variety of factors, such as the type of turbine being proposed, the local topography, local wind speeds and direction, which mean that a rigid separation distance is not appropriate. The impacts of noise need to be considered in their local context and decisions based upon the local evidence. In some instances a 500m separation distance may be unacceptably close to some properties in terms of local impacts whereas in other cases the impact of turbines within a 500mm radius may be imperceptible.

Recommendation 2. *The Committee recommends that ETSU-R-97 guidelines are revised to take into account the lower ambient noise levels in rural areas and the latest research and World Health Organisation evidence on the effects of noise on sleep disturbance.*

Response: Reject

There are technical reasons what we are unable to accept this recommendation.

ETSU-R-97 is not the Welsh Government's to revise. The UK Government's Department for Energy and Climate Change (DECC) was responsible for commissioning it. It is used by decision makers across the UK.

This recommendation has been overtaken by events.

In April 2011 Hayes Mackenzie were commissioned by DECC to review ETSU-R-97. They were asked to investigate the way in which noise impacts for wind farms are determined, including the methods used in practice to implement the ETSU-R-97 guidance, in order to provide suggestions as to areas where it is considered that more detailed guidance is required. This study found, based on case study analysis, that the fundamental approach to assessing wind turbine noise presented by the ETSU-R-97 guidance was still relevant but that there were issues associated with variations in quality of noise assessments.

We have been working with DECC and the Institute of Acoustics to produce a good practice guide on the effective use of the ETSU guidance. We expect a consultation on this good practice guide to be undertaken by the autumn.

We believe that the ETSU-R-97 guidance is still the most appropriate way of assessing wind turbine noise and that it is capable of addressing lower ambient noise levels in different locations. The good practice guide on noise assessments should assist decision makers and local communities.

Recommendation 3. *The Committee recommends that statutory planning guidance is amended to include a requirement that faulty turbines are switched off at specified times overnight as soon as a fault affects its noise emissions and that turbines are not returned to full operation until any such faults are fully repaired.*

Response: Reject

Again, for technical reasons, we must reject this recommendation. We have previously explained that the Welsh Government's Planning Guidance is not on a statutory basis.

In addition, we do not believe that this recommendation could be effectively enforced through planning conditions. Conditions can be attached to a permission in order to make a development acceptable. However, while this can include restrictions on the operating hours, the use of conditions needs to be appropriately applied to be legally defensible, so they must be necessary, relevant, reasonable and enforceable.

There are alternative mechanisms available for addressing the issues of noise produced by faulty turbines, such as the powers available to local authority environmental health departments for the control of statutory nuisance as set out in the Environmental Protection Act 1990.

Recommendation 4. *The Committee recommends that the Institute of Acoustics Working Group carries out meaningful consultation with people living close to wind turbines so that their experiences can help to shape the conclusions and recommendations of the Group that are expected to be published in September 2012.*

Response: Accept in principle

We accept that there needs to be meaningful consultation on the good practice guide produced by the Institute of Acoustics (IOA). As the Hayes Mackenzie research indicates that the skills of those commissioning and considering noise assessments needs to be improved, the target audience for this work will be local authority planners, environmental health officers and applicants. In this way, we should ensure that future noise assessments are adequate. Once the IOA/DECC consultation is issued, the Welsh Government will host a link on its website for people in Wales.

Financial Implications:
Covered in existing budget

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