

Head of Planning
Development Control Services

Ref:MM/Win/Let90315

15th March 2009

Dear Sirs,

**INITIAL OBJECTION LETTER
MATLOCK MOOR WIND FARM**

I have been asked by some local residents to assess this proposed development and the relevant section of the Environmental Statement (ES) on noise impact in relation to this development. I write to raise serious concerns with the Noise Impact Assessment submitted and incorporated within the ES.

We have substantial experience in the assessment of wind farm noise and are undertaking our own independent research. We have also been directly involved in the Judicial Review of a number of decisions which have been overturned. There are significant issues with the application, the ES and data provided. These are material matters.

I have examined this proposal and am clearly of the view serious noise intrusion is possible and indeed at times is likely to arise in this case. Notwithstanding serious inadequacies and errors with the baseline monitoring, it is clear that at some locations the wind farm noise will be loud and will at times be substantially above the background noise level.

Whilst PPS22 requires the use of ETSU-R-97 to rate and assess wind farms it does not state its values are used to set limits. It is clear lower limits can be applied especially as PPS22 separately requires ambient noise increases should be minimised. ETSU-R-97 does not address ambient noise and does not achieve minimisation as it applies threshold levels regardless of the ambient noise levels. This has been accepted at Inquiry level. Very low background noise levels arise warranting lower limits.

The use of LA90 values for wind farm noise alone is incapable of determination as the background and extraneous noise contributions to the LA90 index cannot be accurately removed. Even ETSU-R-97 recognises this problem. This means that any condition designed to control noise cannot rely on the ETSU-R-97 methodologies. This has recently been accepted at an Inquiry (Shipdham) and is also currently subject to an application for Judicial Review in another case.

In view of the complexities and nature of the issues identified we are now writing a detailed critique of the application and the ES. This involves replicating some of the procedures undertaken as part of the original Environmental Impact Assessment, including the modelling process. We are satisfied the modelling is inadequate in this case and under-predicts impact under worst case conditions. It is patently clear that worst case conditions have not been assessed, contrary to the statements. We have also concluded that the information provided makes it impossible to control the impact from noise development by condition.

Some other issues of concern include:

- a) A failure to assess the complex effects of wooded areas and its influence on excess Amplitude Modulation.
- b) Patently inappropriate microphone locations. These do not comply with ETSU-R-97 and will result in elevated readings which do not reflect the true background noise levels.
- c) Insufficient wind data has been obtained. Wind shear data is needed in order to properly assess effects. Excess wind shear is the primary cause of excess Amplitude Modulation. Not because wind speeds are excessive but because there are other effects which occur under such atmospheric conditions which cause excess Amplitude Modulation. This does not appear to be understood or addressed.

Note ETSU-R-97 is recognised as incapable of assessing excess Amplitude Modulation (AM). Recent research has identified AM is the main cause of complaints from tall wind turbines and is a far more common phenomenon than early research relied upon in the ES suggested.

- d) The assessment does not accord with ETSU-R-97 in various respects.

- e) The EIA does not meet regulatory requirements not least as construction noise has not been assessed (by admission). I understand therefore that as a matter of law it cannot meet EU and domestic regulations.
- f) The assessment fails to meet PPS22 in all respects.
- g) The ES suggests that excess wind shear is of no consequence as levels are well below ETSU-R-97 limits. In other words there is recognition the assessment is inadequate but it is suggested this is satisfactory as any increases in levels arising could not exceed the ETSU-R-97 limits. This approach is unacceptable as it prevents appropriate limits being set, it assumes predictions are correct and it fails to identify the true impact, a requirement in law. I do not accept there are the margins suggested. This is disputed.
- h) The assessment relies on out of date research and thus is incomplete / inadequate.
- i) Analysis of the data shows the presence of spurious data sets which has not been removed or the cause identified. Further the failure to record / adequately identify sources of noise during the monitoring means any assessment of whether it is representative of typical conditions is not possible. There is evidence to suggest the data is not of typical conditions. This will be explored further.
- j) There appears to be inclusion of data for inappropriate wind directions. The assessment appears to have been undertaken by the Hayes McKenzie Partnership. If so I am aware they do routinely include inappropriate wind direction data. There is no basis for this although they have long done it. It does not make it right. Inclusion of data where there is excess noise under wind conditions which will not arise when the turbines cause impact is inappropriate. This provides developers with elevated baseline data sets and an excess margin permitting too much noise.
- k) There is a failure to design the site so as to minimise ambient noise increases contrary to PPS22.

Recently we were involved in another case where HMP data was not considered representative and was obtained at incorrect locations. At first their data was accepted at appeal but the decision was overturned by Judicial Review. At the new Inquiry the Inspector accepted the HMP data was not accurate. I consider there are some parallels in this case.

I must advise that should this application be approved based on the existing ES and / or subject to noise limits based on the data submitted, I would strongly recommend to residents the matter is challenged through the courts. I would make the same recommendation if the LA90 limits are used.

Please do not hesitate to contact me either by telephone, email or letter if you require further clarification or wish to discuss the issues, whether now or once our full report is received.

Yours sincerely,

Mike Stigwood
Environmental Health Consultant