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Data obtained under the Freedom of Information Act: Wind Turbine Noise Complaint Survey Data Collected by the University of Salford under contract to the Department of Business, Enterprise and Regulatory Reform: *Research into aerodynamic modulation of wind turbine noise URN 07/1235.*

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This text contains hyperlinks to documents available from the Renewable Energy Foundation website. In the event of difficulties please contact the Foundation at the address above.

Introduction

1. In 2007 the then Department of Trade and Industry (DTI) – later renamed the Department of Business, Enterprise and Regulatory Reform (BERR) – commissioned the University of Salford and the Hayes McKenzie Partnership (HMP) to investigate the issue of Aerodynamic Modulation (AM) noise from wind turbines. (AM noise is a blade swish noise at blade passing frequency, and is a characteristic of wind turbines.)
2. This was in response to an earlier report for the DTI by the HMP, [*The Measurement of Low Frequency Noise at Three UK Wind Farms*](#) (2006), which measured AM noise at three wind farms (understood to be Askam, Bears Down, Blaen Bowi) and found it in excess of that predicted by ETSU-R-97.
3. ETSU-R-97 is the conventional reference given to a document produced by the Energy Technology Support Unit, entitled *The Assessment & Rating of Noise from Wind Farms* (ETSU for the DTI: September 1996). This document, which is widely criticised as dated and inadequate to protect local amenity, is currently the standard guidance for the evaluation of wind farm noise in the UK.

In *The Measurement of Low Frequency Noise at Three UK Wind Farms* (2006), HMP recommended that a means be developed to assess and mitigate against AM noise problems.

4. The University of Salford study, which may be regarded as in part a response to this recommendation, surveyed 133 wind farms and reported that 27 of these had resulted in noise complaints being lodged with the appropriate local authority. AM noise was considered to be a factor for four of the 27 and a possible factor for another eight wind farms.
 - University of Salford, [Research into aerodynamic modulation of wind turbine noise URN 07/1235](#) (July 2007)
5. BERR subsequently issued a statement offering interpretations of the significance of the findings, with the implication that AM was a minor problem.
 - BERR, [Government statement regarding the findings of the Salford University report into aerodynamic modulation of wind turbine noise](#) (July 2007)
6. **However, the University of Salford's report**
 - a. **Did not reveal the names of any of the wind farms with noise problems.**
 - b. **Did not reveal the specifics of the noise complaints.**
 - c. **Did not publish the survey responses from local authorities.**

Consequently, the Government's interpretation of the study could be not validated.

7. Furthermore, those responsible for the peer review of the University of Salford's work, the Government-convened Noise Working Group (NWG) of acousticians expert in wind farm noise, were neither permitted to know the names of the relevant wind farms nor to see the survey responses.
8. Consequently, the depth of the peer-review must be regarded as limited.

REF Judicial Review

9. In 2007, REF submitted a legal challenge to the BERR statement on the University of Salford report and the AM issue. The grounds of the challenge were that the statement ignored the actual measurements of AM described in the 2006 DTI report and that BERR was seeking by a policy statement to arbitrarily terminate scientific debate on AM noise, and to assert irrationally that AM was not a significant problem and should be ignored in the land use planning process.
10. In response the Secretary of State for BERR said:

Nowhere in the 2007 Statement does the Government suggest that AM is not an issue in the UK, nor does it suggest that AM will not and cannot be an issue in

the case of future applications for wind farms close to residences in low background noise areas.

11. The Secretary of State also said that **'it is clear beyond argument that the Secretary of State was aware that AM was an issue in the UK, albeit that the number of complaints was limited'**.
12. REF was satisfied with this assurance and did not pursue the claim.
13. Those interested in the details of the claim and BERR's response can examine the texts here:
 - [REF, Statement of Claim](#)
 - [BERR, Summary Grounds of Resistance](#)

REF Freedom of Information Request

14. However, Renewable Energy Foundation continued to regard the non-disclosure of the survey data collected by the University of Salford as unsatisfactory, and not in the public interest or that of the broader sustainability agenda.
15. Consequently, REF submitted a Freedom of Information request for the list of these wind farms. This request was refused by the University of Salford on the 13th of September 2007.
16. REF referred the matter to the Information Commissioner, and the appeal was upheld on the 8 December 2008.
17. In his decision the Commissioner ruled that the University could not withhold the requested information because it was information on environmental emissions, and that the University was therefore obliged under the Act to release the requested information, with the condition that certain redactions were made to the data to protect the identity of complaining individuals.
18. REF received the requested information, with the redactions referred to above, from the University of Salford on the 12 January 2009. We are now releasing this material into the public domain.
19. European and UK environmental legislation supports the right of the public to environmental data related to projects that will affect their local environs. REF endorses this position and observes that the principles of deep sustainability can only be honoured by full transparency with regard to environmental data.

Freedom of Information Request and Related Correspondence

20. The following files related to REF's FOI request, the University of Salford's initial refusal, the Information Commissioner's investigation, and the eventual release of the requested information. We draw particular attention to the Information Commissioner's letter, which clarifies important matters relating to the release of environmental information.

- [University of Salford to REF, 13.09.07, refusing the FOI request.](#)
- [Information Commissioner to REF, 08.12.08, upholding appeal.](#)
- [Information Commissioners' Decision on FOI request.](#) (Also available on the [Information Commissioners website.](#))
- [University of Salford to REF, 12.01.09, releasing the requested information.](#)

Information Released

21. The following files constitute the information released to REF by the University of Salford. The information was provided as hard copy, and the pdfs provided below were generated by REF for public distribution.

Survey Cover Letter and Summary Table

- [University of Salford Scoping Survey Responses Summary Table](#)
- [University of Salford Cover Letter for Survey Response Form](#)

Completed Survey Response Forms

Salford Report Identifier	Wind Farm	Local Authority
A	Glens of Foudland	Aberdeenshire UC
B	Cruach Mhor	Argyll & Bute UC
C	Royd Moor	Barnsley BC
D	Askam*	Barrow in Furness BC
E	Blaen Bowi	Carmarthenshire UC
F	Carland Cross	Carrick DC
G	Four Burrows	Carrick DC
H	Moel Maelogen	Conwy UC
I	Hafoty Ucha	Conwy UC
J	Tir Mostyn & Foel Goch	Denbighshire UC
K	Michelin Tyre Factory	Dundee UC

L	Causeymire, Caithness	Highland UC
M	Llyn Alaw *	Isle of Anglesey CC
N	Rhyd-y-Groes	Isle of Anglesey CC
O	Trysglwyn	Isle of Anglesey CC
P	Cold Northcott	North Cornwall DC
Q	Bears Down *	North Cornwall DC
R	Delabole	North Cornwall DC
S	St Breock	North Cornwall DC
T	Llandinam P&L	Powys CC
U	Mynydd Clogau	Powys CC
V	Crystal Rig	Scottish Borders UC
W	Hadyard Hill	South Ayrshire
X	Deeping St Nicholas *	South Holland DC
Y	Harlock Hill	South Lakeland DC
Z	Lynch Knoll	Stroud DC
AA	Forest Moor, Bradworthy	Torridge DC

* The four sites with noise complaints identified as arising from AM noise are Bears Down (designated 'First Site' in Sections 4.1 to 4.4 of the University of Salford report), Askam ('Second site'), Deeping St Nicholas ('Third site') and Llyn Alaw ('Fourth site').

REF Comment

22. This newly-released information reveals some of the difficulties encountered by complainants and Councils in resolving wind farm noise complaints.
23. There appear to be puzzling omissions in both the set of sites provoking noise complaints, and in the sub-set of sites with AM noise issues which warrant further investigation.
24. REF believes that this material provides further evidence that the current noise assessment guidance (ETSU-R-97) is not fit for purpose, is failing to protect the amenity of neighbours and is urgently in need of revision.