

Head of Planning Services
South Norfolk Council
South Norfolk House
Long Stratton
NORWICH NR15 2XE

8 March 2008

Dear Sir

**REQUEST BY ENERTRAG UK LTD FOR SCOPING OPINION FOR
POTENTIAL DEVELOPMENT OF 6 WIND TURBINES AT A SITE CLOSE
TO PATTEN LANE, TIVETSHALL ST MARY**

I am writing to you concerning the request which South Norfolk Council has received from Enertrag UK Ltd (“the Developer”) to provide a Formal Scoping Opinion under the Environmental Impact Assessment Regulations in relation to the Developer’s potential development of six wind turbines at a site close to Patten Lane, Tivetshall St Mary.

I have received representations from local residents who are deeply concerned about this potential development. Below I set out some 35 key issues which I believe the Council should include in its formal scoping opinion.

This letter does not contain an exhaustive list of such issues. There are likely to be other matters in addition to those mentioned below.

I would ask you to pay particular attention to section 5 on Visual Impacts, due to growing evidence that developers’ photomontages deliberately mislead the public by reducing the real visual impact of turbines. It is therefore essential for the Council to obtain its own independent assessment of the suitability of any visual impact work undertaken by the Developer.

In accordance with your current deadline of 11 April 2008 I set out below some 35 areas which I believe the Council should take account of in providing its Formal Scoping Opinion to the Developer under the Environmental Impact Assessment Regulations:

1. TYPES OF IMPACT

The Developer must identify, describe and assess the direct and indirect effects of the project on:

- human beings;
- fauna and flora;

- soil;
- water;
- air;
- climate and the landscape;
- material assets and the cultural heritage;
- and the interaction between these factors.

2. ACCURATE BASELINES

Establish accurate baseline information and provides a full analysis of impacts for the life cycle of the project from construction, through operation, to de-commissioning with a comparison to the ‘do nothing’ option.

3. INDIVIDUAL AND CUMULATIVE IMPACTS

Set out the impacts to individual receptors as well as the cumulative impact of the scheme as a whole as well as any proposed monitoring.

4. SITE SELECTION

Explain the reasoning behind the site selection and the scale of the project including examination of alternatives e.g. availability of other sites, alternative number of turbines.

5. VISUAL IMPACTS

The Council’s requirements for Visual Impact Assessment work must allow for the growing evidence that developers’ photomontages often reduce the real visual impact by making the turbines look between three to four times further away from the actual viewpoint in terms of the public’s interpretation of the images.

Viewing distance and suitable viewpoints are not the only issues. A key factor which is often ignored is developers’ misleading panoramic visuals. It should be noted that the choice of lenses for Visual Impact Assessment purposes can have a significant impact on the accuracy of the visual representation. There is professional consensus outside the windfarm industry that single frame images printed full size at A3 or A4, taken within the range of a 70mm to 80mm telephoto lens provides the viewer with a realistic /impression of scale and distance in a medium to long range landscape situation when viewed at normal reading distance.

The Council should therefore obtain its own independent assessment of the suitability of the any visual impact work undertaken by the Developer and of any visual representations which the Developer produces, with special reference to:

- *The Visual Issue: An investigation into the techniques and methodology used in windfarm computer visualisations* by Alan Macdonald, Registered Architect, Architech Animation Studios (UK) Ltd 29th April 2007

- University of Newcastle (2002) *Visual Assessment of Windfarms Best Practice*. Scottish National Heritage Commissioned Report F01AA303A (report by Professor Benson, Department of Architecture, Landscape and Planning, University of Newcastle).

The Council should ensure that its own guidance conforms with the highest standards for visual representations of windfarms. The Developer should be required to conform to these standards.

6. LANDSCAPE IMPACT

Detailed landscape assessment work should be undertaken with particular reference to the South Norfolk Landscape Character Assessment and the Draft Wind Turbine Sensitivity Study in order to provide a transparent, robust and defensible evaluation framework that can provide a sound baseline for making decisions about wind energy development applications on landscape grounds.

7. CIVIL AVIATION

Particular account needs to be taken of air traffic from the nearby airfield at Tibenham, which is home to one of the most important gliding facilities in the country and which is also used by light powered aircraft. In addition, the council should also consider proximity to all other civilian flight paths including but not restricted to Norwich Airport, low flying routes, and other smaller airstrips e.g. Topcroft, Hardwick, Seething, and any private landing strips.

8. MILITARY AVIATION

Proximity to all military flight paths, military air bases and low flying routes.

9. ELECTROMAGNETIC INTERFERENCE

Details of the effects on the operation of both civilian and military radar.
Details of effects on television signal scattering, radio and telecommunications e.g. Ofcom and other operators, with particular reference to interference to the signal from the Tacolneston transmitter. Details of effects on all broadband operators including but not restricted to wireless broadband.

10. LOCATION OF ALL MILITARY ORDNANCE / HIGH EXPLOSIVES

Detailed assessment of the danger from high explosives or other ordnance buried or otherwise which are remaining from former military use.

11. ECOLOGICAL IMPACT FOR ALL ENVIRONMENTS

Details of impacts on any Sites of Special Scientific Interest, with the potential impacts upon these and the species inhabiting them, and any potential impact upon non-designated areas e.g. dispersal networks that may support designated sites and facilitate species movement, also areas of semi-natural vegetation particularly relating to siting of turbines themselves. Natural England also recommend a habitat survey to establish the habitats that are actually present and a number of studies e.g. breeding birds, wintering birds, vantage point surveys to determine bird movement, great crested newts, a bat survey, and butterflies.

The Environmental Impact Assessment should also examine whether the proposal will affect any other scheme/designation e.g. Environmentally Sensitive Area, whether any of the affected roads are classified as “Roadside Nature Reserves” and if so, the impact upon them.

12. ORNITHOLOGICAL IMPACT

Details of all impacts on birdlife including disturbance, habitat loss or damage, migration routes, nesting patterns, a detailed assessment of numbers of birds which will be killed by the Developer’s turbines, and a full protected species survey e.g. woodpeckers, owls and other raptors as well as a detailed survey to establish the presence of other species using or passing through the site.

13. HYDROLOGICAL IMPACT

Details of impacts on drainage, the water table, and all hydrological issues.

14. ACCESS AND VEHICLE MOVEMENTS

Details of the type and frequency of vehicle used to service the proposal during the construction, operation and decommissioning of the project, including details of width, vertical clearance and axle weight.

15. HIGHWAY ALTERATIONS

Details of any proposed highway alterations, tree or hedgerow removal and the mitigation measures, and full details of which alterations would be temporary and which would be permanent.

16. WOODLAND AND HEDGEROWS

Full details should be provided of all trees within 3 km of the site covered by Tree Preservation Orders and of any impacts with the Developer would have on trees or on hedgerows covered by the Hedgerow Regulations.

17. SAFETY OF ROAD USERS

Details of proposals to safeguard all road users during the construction phase including horse riders, cyclists, pedestrians and motorised road users.

18. SITE SAFETY

The Environmental Impact Assessment should include full technical details of turbines including issues such as ability to deal with lightning strikes, structural fatigue, likelihood of catastrophic collapse/failure of structure and measures to prevent ice formation on blades.

19. ANCILLARY WORKS/BUILDINGS

Full details of any ancillary works/buildings required for maintenance and servicing, during and after construction.

20. ENVIRONMENT AGENCY

Details of any issues of concern raised by the Environment Agency

21. ARCHAEOLOGICAL HERITAGE

Detailed investigation, assessment and report on the archaeological heritage of the site.

22. NOISE RADIATION

Details of the proposed impact of noise and vibration on the surrounding locality, together with a detailed assessment of the existing extremely low background noise levels.

A comprehensive noise assessment should be incorporated as an integral part of the Environmental Impact Assessment. This should establish existing background noise levels in the surrounding area for both day time and night time periods in a variety of locations (with particular reference to residential properties) and taking local weather conditions into consideration. The noise assessment should include information with regard to anticipated noise levels from the turbines and include a frequency breakdown of noise levels and any noise from maintenance operations (especially hours of noisy activities). The noise assessment should be carried out with reference to *Noise Radiation from Wind Turbines Installed Near Homes: Effects on Health* (2007) by Barbara J. Frey and Peter J. Hadden; and also with reference to the ESTU document produced by the Department of Trade and Industry “*The Assessment and Rating of Noise from Wind Farms*”.

23. IMPACT UPON RESIDENTIAL AMENITY

Shadow flicker, reflections from rotors (particularly sunrise/set) and the potential impacts of the strobe effect upon human health.

24. IMPACT ON LISTED BUILDINGS

Details of the impact upon the setting of all listed buildings within a 15 km radius of the site.

25. IMPACT ON CONSERVATION AREAS

Details of the impact upon the setting of all conservation areas within a 15 km radius of the site e.g. Churches etc.

26. DETAILS OF GRID CONNECTION POINT(S)

Where and how is it intended to connect to the grid, what apparatus will be used? Are any additional structures required?

27. ILLUMINATION

Will the turbines or the site be illuminated in any way? Details of what lighting is proposed and its consistency with Norfolk County Council’s Environmental Lighting Zones Policy on rural dark landscapes.

28. PUBLIC ACCESS ISSUES

Direct or indirect impact upon footpaths, Bridleways, Public Rights of Way, Green Lanes and potential users (including equines) with reference to distance of structures from them (see County Council and Natural England’s minimum

distance guidelines).

29. RELIABILITY AND EFFICIENCY OF TURBINE POWER GENERATION

Further information as to how this proposal will contribute to national and regional targets for renewable energy, backed up by detailed evidence from similar operational wind farms.

30. IMPACT UPON AGRICULTURE

Details of the impact upon agriculture and the loss of agricultural land.

31. CUMULATIVE IMPACT

The Developer should provide details of the cumulative impact in the area with other wind farm schemes.

32. NATIONAL GRID

Confirmation that National Grid and any other pipeline/infrastructure operators are satisfied that the positioning of the turbines does not endanger any of their apparatus/ installations.

33. DECOMMISSIONING PROCESS

The environmental impact assessment should set out in detail what is intended for the site at the end of its operational life, what it is proposed to remove from the site and how. It should also cover proposals for site restoration.

34. TAXPAYER SUBSIDIES

A full analysis of the financial effects of all subsidies to the Developer during the life of the project from its inception to site closure and restoration, showing the total amount of taxpayer subsidy expected to be paid during each year of the life of the project and the overall total subsidy.

35. COMMUNITY INVOLVEMENT

The Developer must demonstrate detailed and extensive plans to publicise its proposals and engage with individuals and members of the communities and organisations who may be affected by its proposals, including proposed expenditure by the Developer each month on i) publicity, and ii) consultation.

I hope you find the above comments helpful in producing South Norfolk Council's Formal Scoping Opinion.

With best wishes,
Yours faithfully,

RICHARD BACON MP