

SOUTH CAMBRIDGESHIRE DISTRICT COUNCIL

**CAMBRIDGE WINDFARM
PROPOSAL**

**REVIEW OF THE LANDSCAPE AND
VISUAL CHAPTER OF THE
ENVIRONMENTAL STATEMENT**

NOVEMBER 2004

CHRIS BLANDFORD ASSOCIATES

Environment Landscape Planning

SOUTH CAMBRIDGESHIRE DISTRICT COUNCIL

**CAMBRIDGE WINDFARM
PROPOSAL**

**REVIEW OF THE LANDSCAPE AND
VISUAL CHAPTER OF THE
ENVIRONMENTAL STATEMENT**

Approved By: David H Williams
Signed:
Position: Associate Technical Director
Date: November 2004

NOVEMBER 2004

CHRIS BLANDFORD ASSOCIATES

Environment Landscape Planning

SOUTH CAMBRIDGSHIRE DISTRICT COUNCIL

DEVELOPMENT SCHEME:	Cambridge Windfarm Proposal
APPLICATION NUMBER:	S/ 1663/4/5
APPLICANT:	Cambridge Windfarm Limited
AGENT:	Your Energy Limited
LOCATION:	Land south west of A14, between Boxworth and Conington, bounded by A14, bridleway and minor roads. OS Grid Reference of site centre TL340660.
DEVELOPMENT DESCRIPTION:	Installation of 16No x 100 metre high Wind Turbine Generators, Anemometry Mast, Substation and Associated Infrastructure.

CONTENTS

	PAGE
1.0 INTRODUCTION	5
2.0 REVIEW AND COMMENTS ON LANDSCAPE CHAPTER – SECTION 4	7
3.0 REVIEW AND COMMENTS ON HISTORIC LANDSCAPE CHAPTER – SECTION 5	8
4.0 OVERALL CONCLUSIONS	12

1.0 INTRODUCTION

1.1 Chris Blandford Associates were commissioned in September 2004 by South Cambridgeshire District Council to undertake an independent preliminary assessment and provide landscape and visual advice on the Cambridge Windfarm Application.

1.2 More specifically, CBA's brief was as follows:

- to review the development proposals and undertake a preliminary site visit;
- to review the Environmental Statement, in particular Chapter 4.0 – Landscape and Visual Assessment
- to provide preliminary advice and commentary on the planning application; and
- based on the above, to reach conclusions on the suitability of the Windfarm Scheme in this locality.

Background to Application

1.3 South Cambridgeshire District Council received a planning application dated 10th August 2004 for the installation of 16 No. wind turbine generators (each with a maximum tip height of 100m) anemometry mast, substation and associated infrastructure on land located to the north-west of Boxworth.

1.4 The application was accompanied by an Environmental Statement (ES), dated July 2004, which was prepared and compiled by Dulas Limited, a mid-Wales based renewable energy consultancy with Acorus Rural Property Services Limited providing the landscape and visual assessment input to the ES

1.5 The ES was also accompanied by a Planning Appraisal (prepared by Albro Planning and Environmental), which seeks to provide a review of policies that are relevant to the proposal.

1.6 Key issues for the review of the ES are considered to be the following:

- whether an appropriate methodology has been used for assessing the landscape and visual effects of the turbines;
- whether this methodology has been adhered to in undertaking the assessment;
- whether the value judgements on the landscape and visual amenity are robust;
- whether, based on the above, the scheme would give rise to a landscape objection sufficient to support the refusal of the proposals, or whether the scheme is acceptable on landscape and visual amenity grounds.

Methodology

1.7 The stages for this review are as outlined below:

Stage 1 – Data collection and review including:

- review of the existing Environmental Statement, and other background papers;

- discussions with David Rush (Planning Officer) and Lesley Dickinson, (Landscape Design Officer) at South Cambridgeshire District Council;
- a review of National, Regional and District Landscape Character Assessments; and
- a review of the Development Plans for the area , the Cambridgeshire Structure Plan and Local Plan policies relating to renewable energy schemes and countryside and landscape matters.

Stage 2 – Field Assessment including:

- undertaking a preliminary landscape and visual appraisal of the area, within the Zone of Visual Influence of the turbines and beyond, to determine the general characteristics and attributes of the area and also the views and visual amenity of the area; and
- reviewing and visiting the 12No. Photomontage locations and forming a judgement on the likely magnitude of change and a degree of significance of effects on visual amenity.

Stage 3 – Evaluation and Conclusions

- 1.8 In the section, which follows, is a brief commentary on the contents of the ES and the judgements reached on the acceptability of the scheme on the landscape within South Cambridgeshire District.

2.0 REVIEW AND COMMENT ON CHAPTER 2.0: SITE SELECTION AND PROJECT EVOLUTION

Site Selection and consideration of alternative sites

- 2.1 A constraints mapping exercise for alternative sites, based upon analysis of the technical and environmental issues has been carried out. No clear explanation, however, of how landscape and visual effects have been taken into account and why some sites have been rejected on this basis, has been given. In addition, there appears to be no explanation of the need for this particular scale of scheme, in terms of numbers and height of turbines and whether a smaller scale scheme could be viable and be accommodated more satisfactorily within the site and the overall landscape thereby reducing any environmental and social impacts.
- 2.2 Iterative changes to the site design, since scoping consultation are described, but there is insufficient discussion of different approaches in terms of site design in relation to affects on the landscape and visual amenity and how this may relate to mitigating potentially negative adverse effects.
- 2.3 Guidelines on the Environmental Impacts of Windfarms and Small Scale Hydroelectric schemes (SNH 2001) also suggest that:

‘A clear description of the components of the development which will affect landscape should be given whilst considering alternatives’.

3.0 REVIEW AND COMMENTS ON CHAPTER 4.0

Methodology of Assessment

3.1 The methodology used for the landscape and visual assessment is referred to in Paragraph 4.2 and explained throughout Chapter 4.0. The methodology used is based on guidance provided by the following:

- Guidelines for Landscape and Visual Impact Assessment (GLVIA) (LI/IEMA 2002);
- Landscape Character Assessment Guidance (Countryside Agency/ LUC 2003);
- Guidelines on the Environmental Impacts of Windfarms and Small Scale Hydroelectric schemes (SNH 2001).
- Guidelines on the form and content of Wind farm Environmental Statements (University of Newcastle 2002).

3.2 The methodology proposed in Chapter 4.0, covers all the relevant issues and aspects applicable to the assessment of wind turbines. However, there are a number of omissions:

- i) no reference has been made to past Government Planning Guidance or current Planning Policy Statements such as PPG7 -The Countryside, PPG 22 - Renewable Energy or PPS 7 or PPS 22 and government advice contained in these documents;
- ii) that, although tranquillity is referred to within Landscape Character Type descriptions, the criteria for assessing landscape quality should also include an assessment of the tranquillity and remoteness or otherwise of the landscape;
- iii) that the criteria proposed to assess landscape value do not adhere fully to the guidance referred to in the methodology of the ES. Landscape Character Assessment Guidance is clear that landscape value should be based upon an assessment of a number of criteria including; landscape quality, scenic quality, rarity, representativeness of character, conservation interests, wildness and cultural associations. The ES determines landscape value only in terms of presence or absence of local or national landscape designations, combined with frequency of 'locally valued features'. No explanation as to what constitutes a 'locally valued feature' is given and whether this term is intended to incorporate factors other than landscape designations. Guidelines for Landscape and Visual Impact Assessment (LI/IEMA 2002) state that 'Landscape Designation (as a reflection of value to society) is thus only one of a number of criteria that are considered in identifying the relative 'sensitivity', of the landscape to a proposed development. It should not be viewed in isolation. Topic Paper 6: Techniques and Criteria for Judging Capacity and Sensitivity (Countryside Agency/ 2002) states that:

'A judgement needs to be made on the importance to society of the affected landscape. This will be based on and take into account views of the consultees including (if possible) the public'.

The ES makes no reference to the fact that public views or the parish councils views have been sought on landscape matters;

- iv) that the relationship between different scales of landscape character assessment undertaken for the study area (within Paragraph 4.5) is not transparent. The starting point for landscape Character Assessment is PPG 7 (now PPS 7) and the National Landscape Character Map of England (published by the Countryside Agency) together with the County and District/Local Assessments. The main conclusions from these documents on key characteristics and the condition/sensitivity of the landscape should be set out. The

relationship between the Cambridgeshire Landscape Guidelines (1991), the Huntingdonshire Landscape and Townscape Assessment (July 2003) and the landscape consultants own landscape assessment undertaken as part of this ES is not clearly set out. This is, in part due to the fact that Figure 19B (supposedly showing the extent of the Cambridge Landscape Guidelines as well as the Bed and Cambs LCA), does not show the Cambridgeshire Landscape Character Areas, as set out within the Cambridgeshire Landscape Guidelines (1991:44).

- v) that there is no indication given within Paragraph 4.4.8 (baseline conditions) of the methodology/ criteria used to assess condition, yet landscape character types are assigned values for condition (i.e. fair/ good).

The Study Area

- 3.3 The Study Area for the windfarm has been set at 20 kilometres radius around the Site. There is no detailed justification for this distance, other than referring to the Guidelines on the Environmental Impacts of Windfarms and Small Scale Hydroelectric Schemes (2001), which advocates a 25km study area for turbines over 100m. This area is considered to be too small. The ZVI of a 100 metre wind turbine would be likely to extend beyond this 20 kilometre zone possibly up to 25 or 27 kilometres given the topography surrounding the site.

Landscape and Visual Context

- 3.4 The description of the landscape and visual context of the area is generally correct. From a preliminary site visit, however, it appears that there are variations within the Claylands landscape character type that are not detailed within the description of this type (Paragraph 4.6.3). The area of landscape to the South-West of Elsworth has a generally higher occurrence of pronounced treed field boundaries/ hedges and patches of woodland than surrounding areas of landscape within the Claylands.
- 3.5 It is considered that judgements made about the quality (medium), value (medium) and sensitivity (medium) of the Claylands landscape character type are undervalued. There are several historic parks and gardens (Childerley Hall - Grade II* English Heritage Registered Parkland, Madingley – Grade II, American Military Cemetery – Grade II) within the study area. There are a large number of listed buildings and conservation areas, meaning that the settlements are considered to be ‘high quality’. The Huntingdonshire Landscape and Townscape Assessment (July 2003) previously characterised part of the ‘claylands’ landscape type, which is described for this study area. With the Huntingdonshire assessment, the South East Claylands (which are located to the north and west of Papworth Everard and east of St. Neots) ‘contain extensive areas of high quality landscape’. Whilst the South East claylands do not cover the whole of the ‘claylands’ landscape type defined for the ES, this description reinforces the case that there are areas of high quality landscape within this landscape character type in the study area.
- 3.6 There is no reference made to the historic landscape or historic landscape characterisation within the Landscape Character type descriptions.

Historic Landscape Analysis

- 3.7 In relation to the historic landscape issues GLVIA guidance states:

“It is important for landscape assessments to consider the ecological, historical or cultural associations that contribute to the character and

importance of the landscape. Habitats and wildlife have a visible effect on the appearance and also the appreciation and value of landscape, and planning policies for nature conservation and landscape are generally linked through a common approach to land use. Historic associations are often more intangible. However, there are also numerous interrelationships between landscape and cultural heritage and it is important that these links are not overlooked.

Historic landscapes can include gardens, battlefields and the statutory settings of listed buildings and ancient monuments. It may sometimes be unclear where priorities lie when non-statutory designations exist, or even which discipline is best-placed to assess them. Sometimes their cultural heritage value can run counter to any landscape value (as may be the case for some derelict industrial sites), with the possibility that assessment of the landscape setting of historic sites by archaeologists and landscape architects could vary, due to the different focus of study and objectives. Such problems can be avoided by establishing a close liaison between landscape and cultural heritage specialists in the preparation of the EIA, and by each party focusing on their own planning policy context. This will also be of assistance in decision making, as it will enable information in the ES to be directly related to the relevant policy requirements.”

Although historic landscape value is discussed (Paragraph 4.7.4), this section is limited to considering impacts on designated sites. The section does not consider historic landscape issues and does not consider a historic landscape character assessment as suggested by English Heritage in their response to the Scoping report. No assessment is made of impacts on the historic landscape character or fabric of the area and little consideration given to undesignated assets that maybe of national, regional or local importance.

- 3.8 There is inadequate discussion of the setting and character of Conservation Areas, Listed Buildings and Registered Parks and Gardens within the study area. Although Conservation Areas are mapped (Figure 19E), no indication of their geographical extent is given.
- 3.9 There is inconsistency when describing Listed Buildings within the ES. Paragraph 7.5.2 (within Archaeological Assessment) states that there are no listed buildings recorded within the study area, whilst Figure 19E shows that there is an abundance of listed buildings within the study area. It is, however, possible that the archaeological desk-based assessment (discussed in Chapter 7) utilised a different study area within the larger study area set for the ES. There is, however, no Figure to support this assumption.

Visual Analysis

Methodology

- 3.10 The methodology for producing the ZVI is a recognised way of producing these maps, however the cut off point of 20 kilometres for such tall structures in an open landscape such as Cambridgeshire’s is arbitrary with no explanation given.
- 3.11 The ES states that the twelve-photomontage viewpoints were selected in consultation with South Cambridge District Council and were chosen as representative of the main landscape and visual receptors. The viewpoints are generally representative of middle and long distance views, however in two locations, the viewpoints differ from those set out in the Scoping Report (Fenstanton – eastern edge/ G.R. 322681 and Fen Drayton – junction of Cambridge

Road/ Swavesey Road). There is also no viewpoint taken from the Madingley American War Cemetery, within 10 km to the southeast of the site, as requested within the Scoping Report. Although the viewpoints are generally representative, views have not been taken from all Landscape Character Types as is stated within the ES.

- 3.12 It is unclear from the methodology, why effects on landscape are described within section 4.8, rather than being included within Section 4.9 (Assessment of Effects of Landscape).

Viewpoint Analysis

Assessment of Effect on Visual Amenity

- 3.13 The photomontages are useful in illustrating the likely visual effects and change to landscape character and are aids to the assessment of the impact of the scheme. The methodology for the preparation and production of the photomontages has not been provided, however with or without this information it is difficult to determine the accuracy and fair representation the photomontages give of the scheme. It is, however, considered that the visualisations underestimate the true visual impacts from certain viewpoints.
- 3.14 Viewpoint 3 (Boxworth Service Station) is not taken from the large public entrance to the services building, which would have provided a more representative viewpoint with less of the foreground dominated by 'artificial elements'. The foreground view from the current viewpoint, is therefore, dominated by lorries, car parking and the canopy of the petrol station.
- 3.15 Assessment from viewpoint 10 (West of Bluntisham) has determined that effect on the visual amenity will be negligible, due to the fact that the highway is little used, with few nearby dwellings. Within 500m to the east of the current viewpoint, however, a more representative viewpoint can be gained, looking directly south to the site. Accounting for the fact that this viewpoint is close to the 10km boundary of the site, it is considered that the significance of effect will be moderate, facilitated by the topography providing clear views of the site.

Assessment of Effects on landscape character

- 3.16 This section of the landscape chapter is broad brush in terms of the assessment of the degree of the significant effects on individual viewpoints and receptors within the landscape.
- 3.17 Assessment of effects on landscape character is based on discussion of landscape quality; condition; value and sensitivity. There appears to be no transparent detailed assessment of the specific key characteristics of each landscape type that will be affected by the wind farm. Guidance suggests that assessment of sensitivity of landscape character should be 'chiefly governed by whether the intrinsic characteristics of a landscape, relate to the key characteristics of a windfarm (SNH, 2001:2.3). Effects upon the key landscape characteristics within the Claylands landscape type are not clearly set out.
- 3.18 In general, there is a tendency to underestimate the effect on landscape character within the study area. It is considered that the impact is likely to be more significant than stated in the text due to the visual scale of the proposals (height / size and distance between turbines, that the turbines will be new elements in the landscape.
- 3.19 Assessment from Conington (Viewpoint 1), within the Claylands landscape type, suggests that the landscape character will be changed to a 'sub-character area of Claylands with wind turbines'. It is considered that this will have a substantial, rather than 'moderate to substantial' effect on the character of this landscape type.

Conclusions

- 3.20 In relation to the conclusions of the landscape and visual assessment, it is agreed that there will be a long-term change to landscape character within the study area. The ES states that the change to landscape character will be slight to moderate. Review of the quality, value and sensitivity of the described landscape character types, suggests, however that the overall effect will be moderate to substantial. It is considered that the turbines will form a new element of the landscape (i.e. resulting in a fundamental change to character and views), and that the visual scale of the proposal has been underestimated.
- 3.21 It is arguable that the effects identified in the landscape and visual assessments are ‘localised’ and ‘acceptable’. However due to the scale of the proposed development, effects on visual amenity are likely to be widespread (in some instances up to 10km and slightly further) from the site. Whilst the effects on landscape character, are considered to be significant at distances of up to 3.0 to 5.0 km from the site.
- 3.22 On the basis of the review of the Environmental Statement, our initial preliminary landscape and visual appraisal there will undoubtedly be impacts on the landscape. In this particular case however it is considered that the impacts will be greater than suggested by the E.S particularly as the quality/value of the landscape has been underestimated and therefore the effects of the scheme have been underestimated. The scheme will result in significant negative impact on the existing open and gently undulating rural character of the area and on the perception of the scale in the landscape.
- 3.23 It is acknowledged that the level of acceptability of the wind turbines can be based on a number of aspects such as:
- a) that ,as a landscape feature, their acceptability is subjective;
 - b) that their impact on the landscape cannot be fully mitigated;
 - c) that the landscape effects will have to be weighed against other planning / energy benefits of renewable energy as a “proven national interest” and;
 - d) that the majority of the visual effects could be reversed in a 25 year (relatively short-timescale) period.
- 3.24 However in this instance it is considered that the introduction of a cluster of 16No. x 100 metre high wind turbines would be unacceptable and have an adverse impact given the open rural character of the area, the sites proximity to the A14 (T) and extensive opportunities to obtain views of the proposals from roads, public rights of way and tourist routes and notable visitor attractions within the vicinity of the Site. For these reasons, the proposal could be refused on landscape grounds.

Documents Referred to:

- Cambridge Wind Farm Environmental Statement, Written Statement (DULAS, July 2004).
- Cambridgeshire Landscape Guidelines (Cambridgeshire County Council, 1991).
- Guidelines on the Environmental Impacts of Windfarms and Small Scale Hydroelectric schemes (SNH, 2001).
- Guidelines for Landscape and Visual Impact Assessment (LI/IEMA 2002).
- Huntingdonshire Landscape and Townscape Assessment – Consultation Draft (July 2003).
- Landscape Character Assessment Guidance (Countryside Agency/ LUC 2003).
- Proposed Cambridge Wind Farm – South Cambridgeshire – Scoping Report (South Cambridgeshire District Council, January 2004).
- Topic Paper 6: Techniques and Criteria for Judging Capacity and Sensitivity (The Countryside Agency, 2002).