

Weston Hills Wind Turbine Planning Statement

Introduction

This Planning Statement accompanies a planning application to North Hertfordshire District Council for the erection of three wind turbines at Weston Hills, Weston.

The Environmental Statement comprises the following documents:

Non-Technical Summary

Environmental Statement

Drawings as detailed in the Environmental Statement

Planning Statement

As required under the EIA regulations the Non-Technical Summary provides a synopsis of the assessments contained within the Environmental Statement (ES) and presents the information in a non-technical manner.

This Planning Statement has also been prepared in support for the application and has been submitted to North Hertfordshire District Council.

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1. THE CLIMATE CHANGE BACKGROUND

It is internationally acknowledged that the global climate is warming and that increases in the levels of greenhouse gases in the earth's atmosphere, such as carbon dioxide (CO₂), are a major contributor to climate change. In the past 50 years, most of the increase in greenhouse gas emissions has been due to human activity. According to the Department for Business Enterprise and Regulations Reform, the United Kingdom (UK) is currently responsible for three per cent of global greenhouse gas emissions even though it has only 1 per cent of the world's population, with power stations providing over a third of the CO₂ produced by the UK.

This is the background that has moved the UK Government to encourage renewable energy power generation.

Climactic changes that are predicted to follow unrestrained carbon emissions include increases in temperature, increases in sea level, higher winter precipitation and lower summer precipitation. In combination these factors will have a serious effect on the UK population, and dramatic effects on communities around the world.

Renewable energy sources are one of the ways that these effects can be limited. In the UK there is one of the most consistently windy climates in Europe and the Government's Planning for Renewable Energy A Companion Guide to PPS22 (2004) recognises that the principle of harnessing wind energy by wind turbines is well established, and that the UK is particularly well placed to utilise wind power. It also acknowledges that developments in the technology and the electricity market over recent years now mean that wind power is found to be viable across the UK.

Although research and development is carried out into new and different forms of generating electricity from renewable sources, wind power is the only fully developed method that can be deployed on a large scale. Wind power generation therefore has a crucial role to play in helping the UK to limit and remedy its own dependency on fossil fuels.

The Energy Background

In addition to the climate change pressures, the UK faces energy availability difficulties that have developed since the North Sea oil and gas resources became depleted.

A significant amount of the UK energy is sourced from eastern Europe and the Russian states. This gas has to be transported across Europe before it is converted to electricity in the UK.

This emerging dependency on distant gas, which can easily be re-routed to other users if political drivers develop, is also a potential threat.

Wind power generation can reduce this dependency and help fill a gap in the UK energy resource that will not be filled until nuclear energy becomes available in 20 to 25 years time.

Every kWh of electricity generated by wind power in the UK, displaces some 5 kWh of gas that would have to be dispatched from Russia.

The Applicant

The applicant for this scheme is a local company Weston Park Farms.

The principles, John and Paul Cherry, are farmers in Weston and are committed to developing their agricultural business. They see wind power generation as a natural extension of optimising the use of their land resource.

The Planning Application

Weston Park Farms has submitted a full planning application to North Hertfordshire District Council seeking permission to erect three wind turbines.

The application details the ancillary requirements for the scheme: permanent access tracks, electrical connection building, underground power cables, temporary wind mast, and temporary construction requirements for erection of the turbines.

The planning application is supported by the following:

- Environmental Statement

- Drawings of the site layout

This statement is to support the planning application. It sets out the basis of the proposal and identifies the relevant national, regional and local planning policies and the need for the project at these levels.

Consultation

Two public meetings have been held, and local residents invited to comment on the proposal. There has also been extensive coverage of the scheme in the local press. The Weston Parish Council has been active in researching independently, the issues surrounding wind turbine schemes and they have submitted comments to the planning authority.

Summary of the Proposal

The site

It is proposed to locate the three wind turbines on a single, level field on Weston Hills, near to the village of Weston. This is a rural location on high ground to the south of Baldock close to the southern bypass of the town. The field is arable farmland owned and managed by the applicants.

The land is designated Green Belt under NHDC Policy No LC2 and the compliance of the proposal with the Green Belt designation is reviewed later in this paper.

The wind turbines

The wind turbines proposed are Vestas V80 machines capable of generating 2 MWe each. They have a rotor of 80m in diameter, mounted on a hub assembly supported by a tower 80 m in height.

Infrastructure

The three turbines will be accessible by 3m wide tracks from the site entrance. At the base of each turbine will be a turning/parking area.

Each turbine will be connected to a switchroom by underground cable. The switchroom will house the electrical isolation and connection switches, electricity meters and other equipment to allow management of the connection to the national grid.

For construction, the access tracks will be wider to allow cranes and parts to be brought to the site of each turbine. There will be a hard base for the cranes to use during construction. These facilities will be dismantled after construction.

Connecting to the grid

A new permanent connection to the local electricity distribution network is required. This will pass underground across agricultural land and highways to the existing EdF 33kV local distribution network substation at Letchworth Road

Construction

Site activities will cover a period of about 4 months during which the bases will be prepared with concrete, and the turbines themselves will be erected and commissioned. A transport plan will be prepared for the construction phase of the development to ensure that all vehicles entering and leaving the site use designated routes.

Operation

The turbines will be operated by the wind with little on-site activity. Remote monitoring will allow service visits to be planned and minimise unnecessary visits.

Decommissioning

At the end of the 25 year planned life of the wind turbines they will be decommissioned with the site being reinstated. The decommissioning will involve the removal of all above ground structures and the reinstatement of ground disturbed by the works to agricultural use.

Environmental Benefits

The scheme will produce electricity from a wholly renewable source. As such, the electricity will displace that normally produced from the main fossil power stations in the UK. These are a mix of coal, oil and gas stations, which have an averaged quantity of greenhouse gases released per MWh of electricity supplied.

This scheme will displace some 15,300 tonnes of Carbon Dioxide greenhouse gas emissions per year.

The electricity produced will be capable of providing the needs of 3300 homes. This is a significant proportion of the 4 -5,000 homes in Baldock.

The comparison of energy used in manufacture with the energy produced by a power station is known as the 'energy balance'. It can be expressed in terms of energy 'pay back' time, i.e. as the time needed to generate the equivalent amount of energy used in manufacturing the wind turbine or power station.

The average wind farm in the UK will pay back the energy used in its manufacture within six to eight months, this compares favourably with coal or nuclear power stations, which take about six months.

The Need for This Scheme

The need for this scheme exists at several levels:

- 1) The need to increase the supply of energy from renewable resources to reduce greenhouse gas emissions and meet international and domestic targets,
 - 2) The need to increase the supply of energy from renewable resources to meet shortfalls in the supply from traditional energy sources,
 - 3) The need to meet regional renewable energy targets,
 - 4) The need to meet local renewable energy targets.
- 1) The need to increase the supply of energy from renewable resources to reduce greenhouse gas emissions and meet international and domestic targets

In 1997, the UK Government committed under the Kyoto Protocol to a binding target of reducing greenhouse gas emissions by 12.5% below 1990 levels by 2008-2012. In addition, the UK Government has chosen to set a more stringent domestic goal of reducing CO₂ emissions by 20% on 1990 levels by 2010.

The UK Government is also obliged to encourage the use of renewable energy through the requirements of the European Union's (EU) Directive on the Promotion of Electricity from Renewable Energy Sources in the Internal Electricity Market (the Renewables Directive). Under this Directive, Member States are required to adopt national targets for renewables that are

consistent with reaching the overall European Union target of 12% of energy (including domestic heating, transport, electricity etc.) and 22.1% of electricity from renewables by 2010.

In January 2000, the UK Government set a target to increase the proportion of electricity provided by renewable sources to 10% of electricity supplied by 2010, subject to the cost to the consumer being acceptable. In 2003, the Government's Energy White Paper "Our Energy Future - Creating a Low Carbon Economy" confirmed the Government's intention to cut carbon emissions by 60% by 2050 and their ambition to supply 20% of electricity from renewable sources by 2020.

Although the UK Climate Change Programme Review published in March 2006 reported that the UK is currently on track to meet its Kyoto commitment, it is only expected to deliver a cut of 15-18% in CO₂ levels by the end of the decade. The report also confirmed that although the Government is making progress towards the 10% renewables target, this level of generation is unlikely to be achieved some time after 2010. More therefore needs to be done if all of the Government's targets are to be met, and the development of additional renewable energy resources has an important role to play in these respects.

2) The need to increase the supply of energy from renewable resources to meet shortfalls in the supply from traditional energy sources

Diversity of fuel supplies to the UK has been a concern to the Government as traditional energy sources have become depleted.

Renewable energy electricity generation directly displaces imported fuels, such as gas from Eastern Europe, and can have a long term effect on the balance of fuel supplies required by the country.

There is therefore a need to increase the generation of energy from renewable sources.

More renewable energy generation can provide greater diversity in our energy mix, which is important in ensuring security and continuity of supply as the UK becomes more dependable on overseas sources of fossil fuel.

3) The need to meet regional renewable energy targets

The East of England Regional Assembly has adopted two policies on renewable energy that identify the regional need for renewable energy schemes in Regional Policy Guidance.

RPG 9 includes the following text

"Energy/emissions - to maximise energy efficiency and minimise harmful emissions and waste by encouraging forms of development suited to renewable energy, combined heat and power and community heating."

RPG6 includes Policy 60 Renewable Energy which states that “Development Plans should include proposals for renewable energy generation and set out criteria by which such applications will be considered, with account taken of land use and environmental implications and their desirability in sustainability terms.”

4) The need to meet local renewable energy targets

Whilst there are no specific statutory requirements for Hertfordshire to set or achieve renewable energy targets, there is a statutory requirement for LDDs to conform with the East of England Plan. In doing so Hertfordshire and the districts within it need to consider how they can contribute towards the regional renewable energy targets. There is also strong scientific evidence, mounting regulatory pressures and a clear appetite and desire compelling the County to move towards a lower carbon future.

The Development Plan

The Planning and Compulsory Purchase Act 2004 states that determination of planning applications must be made in accordance with the development plan, unless material considerations indicate otherwise. That Act (section 38(3)) defines the development plan as the adopted local development plan documents and the Regional Spatial Strategy for the region.

This document refers specifically to policies relevant to the development of this renewable energy scheme.

The Regional Spatial Strategy for the East of England has been evolving in this respect since 2001. However, it has created a framework of policies and targets for individual counties.

The renewable energy policies are currently under review, and Arup, White Consultants and the University of Northumbria were commissioned by the East of England Regional Assembly (EERA) to undertake a study that would inform the further Review of the East of England Plan, with regard to renewable energy generation.

There seems to be a consensus that specific targets are unhelpful, and the future RSS will urge planning authorities to allow renewable energy schemes regardless of existing schemes in the area as far as targets are concerned.

2. RENEWABLE ENERGY AND SUSTAINABLE DEVELOPMENT

NHDC

Development plan

In the analysis of policies relevant to the application, it has been possible to draw on existing policies in preference to those of the Draft Local Development Framework. In the area of renewable energy, the changes already envisaged demonstrate a clear forward position which reflects the regional and structural plans already approved. The Draft LDF is referred to below.

NHDC Draft LDF

The East of England Sustainable Development Round Table carried out a study which concluded that 14% of the region's electricity could be generated from renewable sources by 2010. This is the figure which fed into the RSS.

The diasaggregated figure for Hertfordshire was the production of 153,000 mega watt hours per year (MWh/year) by 2010. This figure was 3% of the county's predicted electricity consumption by 2010.

Hertfordshire County Council, in conjunction with Hertfordshire Environmental Forum, Hertfordshire Technical Chief Officers Association, commissioned a study into renewable energy in the county in 2004 (Hertfordshire Renewable Energy Study). The findings were published in July 2005. The study assessed how the county could provide the 153,000 (MWh/year) of renewable energy which was proposed by the East of England Sustainable Development Round Table. They are keen to contribute towards this target through appropriate renewable energy development in the District.

Both government and regional guidance, require the inclusion of policies in the LDF which encourage renewable energy schemes, including the incorporation of small-scale renewable energy technology within new development (e.g. solar panels, photovoltaic (PV) panels, micro-scale wind power systems and geothermal heating). The proposed polices should ensure that appropriate renewable schemes come forward and that we help to meet the government's CO₂ reduction targets.

Wind energy is likely to be the major contributor to renewable energy in the eastern region. Much of this will be off-shore, although some will be onshore.

One of the findings of the Hertfordshire Renewable Energy Study was that if renewable energy targets are to be met, much of the energy will have to be produced by wind power. Another finding was that the areas of the County which were technically feasible for wind energy development were in North Hertfordshire and East Hertfordshire. They have already received an application for a wind turbine, and may receive more in the future. All applications for wind development will be assessed against this policy and other relevant policies in the LDF.

With regard to the Issues and Options consultation, the highest response on the energy generation issue was that the LDF should include policies which encourage both small scale renewable energy schemes and large scale renewable energy schemes such as wind farms (42%).

The policy is intended to promote renewable energy where this is appropriate. The policy seeks to allow renewable energy development subject to serious consideration of the impacts. A balance needs to be struck between the beneficial outcomes of renewable energy, and any adverse impacts produced by the development itself.

Preferred policy wording

In considering development proposals for renewable energy development, we will weigh the benefits of producing energy from non-polluting sources, and the social benefits of community owned schemes where this is the case, against any adverse impacts produced by the development. We will permit development proposals, where they have no unacceptable impacts.

In considering such proposals, we will assess the impacts on:

- 1) residential/workplace amenity or human health; and**
- 2) the visual amenity of the local area, including landscape character; and**
- 3) local natural resources, including air and water quality; and**
- 4) biodiversity, nature conservation or historical/archaeological interests; and**
- 5) public access to the countryside; and**
- 6) the openness and visual amenity of the green belt.**

We will expect developments to be located at, or as close as possible to, the source of the resource needed for that particular technology, unless, exceptionally, it can be demonstrated that the benefits of the scheme outweigh the costs of transportation of that resource.

In all cases, end of life/redundant plant, buildings, apparatus, and infrastructure must be removed and the site restored to its former state or a condition agreed with the Council.

In addition, we will also assess the impact of wind development on:

- a) highway, aviation and bird safety; and**
- b) existing transmitting or receiving systems; and**
- c) potential nuisance arising from noise, shadow flicker, electromagnetic interference or reflected light.**

We will require applications for all major renewable energy proposals to be accompanied by a statement detailing:

- i) the environmental effects of the development; and**
- ii) its benefits in terms of the amount of energy it is expected to generate; and**
- iii) any unavoidable damage that would be caused during installation, operation or decommissioning, and how this will be minimised and mitigated, or compensated for.**

Structure Plan

The Eastern Region Renewable Energy Planning Study commissioned by the DBERR, has explored the potential for renewable energy in Hertfordshire. The study has shown that the best opportunities for renewable energy projects in Hertfordshire are active and passive solar sources, municipal solid waste & general industrial & commercial waste, short rotation coppice & forestry, and straw, along with small amounts from various other sources. Estimates based on the study are tabulated below.

| Hertfordshire Estimated Accessible Renewable Energy Resources (Gwh/y) | | |
|--|-----------------------|-----------------------|
| | in 2005(Gwh/y) | in 2025(Gwh/y) |
| Hydro | negligible | negligible |
| Wind | negligible | negligible |
| Active Solar | 224 | 254 |
| Passive Solar Design | 187 | 480 |
| Photovoltaics Domestic | 327 | 372 |
| Photovoltaics Commercial | 211 | 280 |
| Poultry Litter | 7 | 7 |
| Animal Slurry | 20 | 30 |
| Municipal Solid Waste / General Industrial & Commercial Waste | 250 | 250 |
| Anaerobic Digestion | 5 | 5 |
| Landfill Gas | 28 | 28 |
| Short Rotation Coppice & Forestry | 146 | 320 |
| Straw | 220 | 257 |
| TOTAL | 1625 | 2283 |

Energy generation from renewable sources can have their own environmental consequences which must be weighed against the national interest of producing 'clean' energy. Proposals for developing renewable energy sources will therefore need to consider the immediate impact of such projects on the local environment, while having regard to Government policy and to the fact that renewable energy schemes can have particular locational constraints (since, in many cases, the resource can only be harnessed where it occurs).

POLICY 54 ENERGY GENERATION

Where there is a viable choice between development to generate energy by renewable or non-renewable means, priority will be given to renewable generation, subject to the other policies of this Plan and particularly those relating to the environmental effects of development and impact on traffic generation. Development of facilities to provide energy from non-renewable sources will generally be more appropriate on sites currently or previously used in this capacity. The provision of combined heat and power will be encouraged in these cases.

Development of facilities to provide renewable energy will be supported, subject to the other policies of this Plan, and particularly those relating to

the environmental effects of development and impact on traffic generation. Such facilities should be provided as close to the source of the material used in the process as possible.

Regional Planning Guidance

The RPG 9 includes a number of strategic objectives of which one is directly relevant to renewable energy: **Energy/emissions** - to maximise energy efficiency and minimise harmful emissions and waste by encouraging forms of development suited to renewable energy, combined heat and power and community heating.

In addition, the RPG6 includes **Policy 60 Renewable Energy** which states that Development Plans should include proposals for renewable energy generation and set out criteria by which such applications will be considered, with account taken of land use and environmental implications and their desirability in sustainability terms.

At a regional level, the **emerging RSS** includes two policies relating to renewable energy and energy efficiency.

Policy ENV8 Renewable Energy and Energy efficiency aims to help the region to meet and improve on its renewable energy targets. To achieve these targets, research indicates that the region would need to provide 1,700GWh/yr from onshore wind, which equates to a target of 647MW of installed capacity for onshore wind for 2010.

The EERA East of England Draft Plan refers to sub-regional targets for renewable energy stating that these were not included within the draft RSS, instead the emphasis should be that *“each part of the region should bring forward the maximum contribution the market could deliver, commensurate with environmental and social considerations”*

This is a material adjustment of policy which is intended to encourage planning authorities to avoid complacency when targets have been achieved.

National Planning Guidance

At a national level, the UK Government has published a range of documents setting out government policy on energy generation and supply.

The **Energy Review Report³** (published 2006) seeks to secure clean affordable energy for the UK for the long-term. It highlights the security of energy supply and stresses the promotion of diverse sources and fuel types, including renewables as these are recognised as generally occurring at the site of the plant, are free and will never run out or need to be imported.

The 2003 **Energy White Paper⁴** sets out the Government’s aspiration that by 2020 20% of UK electricity will be from renewable sources and that by 2050

this will rise to at least 30-40%. The White Paper emphasises that onshore wind farms will be a key part of the future backbone of the electricity system.

This is reflected in **Planning Policy Statement 22 Renewable Energy (2004)** which is the principle national planning policy guidance relevant to wind energy developments. This document clearly states that increased development of renewable energy resources is vital to facilitating the delivery of the Government's commitments on both climate change and renewable energy and sets out the need for new sources of onshore wind energy in order to address climate change.

Paragraph 1(i) stating that renewable energy developments should be capable of being accommodated throughout England where the technology is viable and environmental, economic and social impacts can be addressed satisfactorily.

Paragraph 1(iv) states that the wider environmental and economic benefits of all proposals for renewable energy projects, whatever their scale, are material considerations that should be given significant weight in determining whether proposals should be granted planning permission.

In addition PPS22 sets out a number of key principles for planning for renewable energy, one of which (Principle iv) states that *“The wider environmental and economic benefits of proposals for renewable energy projects, whatever their scale, are material considerations that should be given considerable weight in determining whether proposals should be granted planning permission.”*

PPS22 also sets out the Government's aspiration to double renewables' share of electricity generation between 2010 and 2020 in order to meet national energy targets and to achieve the UK's legally binding target to reduce greenhouse gas emissions by 12.5% below 1990 levels. It is evident that Local Authorities are key to achieving these central aims.

Conclusion

In conclusion, the proposal would support national, regional and local plans, policies and proposals relevant to energy generation and supply in that it would generate wider economic and environmental benefits through a contribution to achieving national renewable energy targets, reduction in greenhouse gas emissions and security of energy supply for the UK.

3. GREEN BELT

NHDC

Development plan

Policy 2 - Green Belt

In the Green Belt, as shown on the Proposals Map, the Council will aim to keep the uses of land open in character. Except for proposals within settlements which accord with Policy 3, or in very special circumstances, planning permission will only be granted for new buildings, extensions, and changes of use of buildings and of land which are appropriate in the Green Belt, and which would not result in significant visual impact.

"A Green Belt is an area of land, near to and sometimes surrounding a town, which is kept open by permanent and severe restriction on building" (The Green Belts, DoE, 1988). Government advice in circulars and Planning Policy Guidance: Green Belts (PPG2, January 1988), gives five purposes of Green Belts:

- to check the unrestricted sprawl of large built-up areas;
- to safeguard the surrounding countryside from further encroachment;
- to prevent neighbouring towns from merging into one another;
- to preserve the special character of historic towns; and
- to assist in urban regeneration.

For Green Belts, the Government has made clear that there is "a general presumption against inappropriate development within them" (PPG2, January 1988). The Council supports this view, as well as Structure Plan Policy 51, which does not permit development in settlements within the Green Belt. The Council views the threat in the Green Belt of many quite small developments together as equal to fewer but larger individual proposals. Thus, each change will be resisted if several added together would be harmful to the Green Belt aims or its character in the long term.

The Council accepts that some change will be necessary, possibly for social, economic, environmental or functional reasons. For example, the continued use of historic or attractive agricultural buildings is often worthwhile and supported by the Government (PPG2 q.v. para 2.10), or the public utilities (responsible for gas, electricity, water etc) need to develop their facilities. In certain instances, recreational uses can be introduced; for guidance on leisure, tourism and hotels see Policies 39, 40 and 41 respectively. Such changes should not harm the aims of the Green Belt, and in any event seek to improve the environment.

National and structure plan policies identify appropriate uses in the Green Belt. These are set out in full in the Structure Plan Policy 1. Thus, except within Green Belt settlements and in very special circumstances, the purposes listed are "that required for mineral extraction, agriculture, small scale

facilities for participatory sport and recreation, or other uses appropriate to a rural area; or the use for hospitals or similar institutional purposes of existing large residential buildings situated in extensive grounds, provided (a) the buildings are not suitable for continued residential use, and (b) the proposed use is not such as to lead to a demand for large extensions or for additional buildings in the grounds." Therefore, Local Plan Policy 2 applies in addition to the Structure Plan Policy 1, and relates to other policies in this Plan, in particular for the re-use of rural buildings, and extensions and replacements to dwellings (Policies 25 and 30).

Structure Plan

Development Control and Priorities

In the Green Belt there is a presumption against inappropriate development and permission will not be given, except in very special circumstances, for purposes other than those detailed in PPG2. Local plans may list settlements within the Green Belt where infilling will be permitted under the guidelines contained in PPG2 and in accordance with Policy 6 of this Plan. Subject to compliance with the criteria in paragraph 3.8 of PPG2, re-use of existing buildings within the Green Belt is not an inappropriate form of development, though the acceptability of re-use in any particular case will also fall to be considered in the light of other relevant policies and considerations, in particular traffic impact.

Throughout the Green Belt priorities for the use of land are to:

- i) provide opportunities for access to the open countryside for the urban population;
- ii) provide opportunities for outdoor sport, and outdoor recreation near urban areas;
- iii) retain attractive landscapes, and enhance landscapes near to where people live;
- iv) improve damaged and derelict land;
- v) secure the nature conservation interest;
- vi) retain land in agricultural, forestry and related uses; and

Development which is permitted within the Green Belt, and management of land and activities within it, should aim to contribute to these priorities.

National Planning Guidance

The Government guidance on Green Belt planning matters is contained in PPG 2.

PPG 2 suggests that inappropriate development would be harmful to the Green Belt. However, a key point is the duration of any activity, and in particular, PPG 2 states that mineral extraction is not inappropriate because it is essentially temporary, so too is a wind turbine, indeed a wind turbine will have a life of about 25 years, significantly less than most extraction operations.

Conclusion

It is considered that this proposal does not reduce the function of the Green Belt area, and that the wind turbines will not detract from the natural landscape.

However, in addition to these considerations, the Council may have consideration of the appropriateness of the proposal with regards to the Green Belt status of the land.

A key point to consider is whether the development is appropriate or inappropriate.

PPG 2 on Green Belts suggests that inappropriate development would be harmful to the Green Belt. It is argued that wind turbines are not harmful to any of the purposes or functions of the Green Belt. In particular, whereby PPG 2 suggests that mineral extraction is not inappropriate because it is essentially temporary, so too is a wind turbine, indeed a wind turbine will have a life of about 25 years, significantly less than most extraction operations.

It is however, possible to decide that the three wind turbines are harmful to the visual amenity, an essential part of this particular Green Belt area. It is suggested that any temporary reduction in visual amenity is justified by the special circumstances created by the energy background that the country currently faces, all as argued above. In that the scheme contributes to the lowering of climate change emissions, it may be considered a good use of the green belt designation. The openness of the area is not compromised by the scheme.

The single electricity connection building is essential to the operation of the wind turbines. It is consistent with the scale of a small changing facility which would be permitted for recreational use. It is permitted as an essential building for use with the scheme which as noted above does not conflict with the purpose of the land being designated as Green Belt.

The area will remain as a non-residential zone and can continue allowing the natural evolution of flora and fauna which is shadowing the growth of population in the towns and villages.

4. AONB Chiltern Hills

NHDC

Development Plan

NHDC planning area includes the Chiltern Hills, an Area of Outstanding Beauty. Its protection is incorporated in a specific policy, Policy 11.

Policy 11 - Chilterns Area of Outstanding Natural Beauty

In the Chilterns Area of Outstanding Natural Beauty, the Council will conserve and enhance the natural beauty of the Area, when any development is permitted, by ensuring it is carefully sited and is of high quality design. In addition, account will be taken of the effect on farming and woodland land uses, and wildlife conservation interests. Access to the countryside for quiet enjoyment will be improved as far as possible; any provision for other leisure activities must be compatible with existing land uses and landscape conservation.

The landscape between Hitchin, Lilley and Hexton which follows the escarpment of the Chiltern Hills is important nationally. About 2000 hectares of land within North Hertfordshire fall within the Chilterns Area of Outstanding Natural Beauty, designated in 1964. The Countryside Commission is responsible for proposing new or changes to Areas of Outstanding Natural Beauty (AONB), the primary purpose of which is to conserve natural beauty whilst taking account of recreation opportunities and the other existing land uses. A recent review of the boundary to the Chilterns AONB was approved by the Secretary of State in 1990. The Council supports recent efforts to conserve and enhance the AONB, in particular the revised 'Policy for Woodlands'. The Structure Plan Policy 2 fully explains the expectations for change in the AONB whereby agricultural and forestry practices and mineral extraction (needed in the national or regional interest) allow for the preservation of the Area's beauty. Any building, communications, or leisure development should not lower this nationally important landscape quality.

Structure Plan

The structure plan references to the Chiltern Hills AONB are specific to developments within the designated area.

POLICY 42 CHILTERNNS AREA OF OUTSTANDING NATURAL BEAUTY

Within the designated Chilterns Area of Outstanding Natural Beauty (AONB), as indicated on the Key Diagram, any development proposals which would adversely affect the special character, appearance and conservation of the AONB will not be permitted.

National Planning Guidance

At a national level the Government has published **PPS22 Renewable Energy** that considers land use and planning issues associated with renewable energy projects. This includes the landscape and visual impacts of renewable energy and sets out the factors that Local Planning Authorities should consider when analysing the landscape and visual effect of individual applications, which include; national designations, landscape character areas (where already identified), landscape sensitivity, landscape and visual analysis and cumulative effects.

Conclusion

The proposal is 12 km away from the edge of the AONB. The maps in the ES showing the Zone of Theoretical Visibility confirm that the generally undulating nature of the AONB limits the potential visibility. The distance is such that viewers would not receive an intrusive impact.

There is no direct adverse influence on the Chiltern Hills from the proposal.

5. NATURE CONSERVATION

NHDC

Development Plan

Policy 14 - Nature Conservation

For Local Nature Reserves, Sites of Special Scientific Interest, Nature Reserves of the Hertfordshire and Middlesex Wildlife Trust, and sites of local Wildlife Significance, the Council will preserve their wildlife importance by not normally granting planning permission for development proposals in these sites, or which may harm their value, and will seek their continued management for nature conservation.

For sites of Wildlife Value, the Council will not normally grant planning permission for development proposals which do not take account of and encourage the potential nature conservation value of the site.

Elsewhere, or when a development proposal is acceptable, the Council will expect development proposals to take account of, and where possible, to show improvements to the nature conservation value of the site and its surroundings. In addition, the Council may require the preparation and implementation of a management scheme to maintain or enhance the site's nature conservation value

Even a casual observer in North Hertfordshire cannot fail to notice the variety of wildlife, the richness of which should be conserved. The Countryside provides the greatest resource and nature conservation aims are most important in specific Countryside Areas.

The rarer plants and animals and more interesting habitats may be protected as Sites of Special Scientific Interest identified by the Nature Conservancy Council or as nature reserves owned or managed by the Hertfordshire and Middlesex Wildlife Trust. The District Council also recognises that some sites of very great regional or local importance may not be protected other than by local policies and effort. The most important are defined as of Wildlife Significance, the others as of Wildlife Value.

Opportunities for nature conservation occur in towns as well as the countryside. The Council considers nature conservation should be promoted in a proper framework, appropriate sites protected from damage and all efforts made to enhance the wildlife resource.

Structure Plan

The Structure Plan incorporates ecological considerations in Policy 38.

POLICY 38 CRITICAL CAPITAL AND OTHER IMPORTANT ENVIRONMENTAL ASSETS

Critical Capital and other important environmental assets as listed below will be given protection from development or other proposals which would cause loss, permanent damage or significant and irreversible change to those particular characteristics and features that define their special quality. The degree of protection given will be appropriate to status, according to their international, national or local importance.

The maintenance and enhancement, where appropriate, of these assets will be encouraged.

- i) The Chilterns Area of Outstanding Natural Beauty;
- ii) Special Areas of Conservation, Special Protection Areas, National Nature Reserves, Ramsar Sites and Sites of Special Scientific Interest;
- iii) Local Nature Reserves, other nature reserves and other identified Wildlife Sites and Prime Biodiversity Areas;
- iv) Identified landscapes of high historic value, including Registered Parks and Gardens of Special Historical Interest;
- v) Regionally Important Geological/Geomorphological Sites (RIGS);
- vi) Species of fauna and flora protected by law or identified in the UK Biodiversity Action Plan as in need of particular conservation action;
- vii) Scheduled Ancient Monuments and other archaeological remains of both national and more local importance, and their setting;
- viii) Listed buildings and their settings and other buildings of architectural, archaeological or historic merit;
- ix) Conservation Areas;
- x) Unregistered historic parks and gardens, and their setting;
- xi) Sites with historic associations.

Regional Planning Guidance

The RPG includes two policies in RPG6 relevant to the effect of development on biodiversity and nature conservation:

Policy 37: General management principles for conserving and enhancing the natural, built and historic environment - which focuses on conservation and enhancement of the important aspects of East Anglia's natural, built and historic environment, and states that all important aspects of the countryside, including special sites should be protected.

Policy 38: Protection of designated areas - relates to protection and enhancement of nationally designated areas of nature conservation importance. Development likely to significantly affect SSSI's should only be allowed if the benefits clearly outweigh the nature conservation value of the site.

- **Policy 41: Local Biodiversity Action Plans** states that LPA should take positive action to achieve the targets set in national and local Biodiversity Action Plans through planning decisions.

National Planning Guidance

UK Biodiversity Action Plan (UKBAP) is the Government's response to the Convention on Biological Diversity¹⁴ and includes Action Plans for a range of habitats and species that occur within the UK. There are no Action Plans for any of the habitats recorded within or in the vicinity of the development area.

Conclusion

Given the nature of the site and the fact that it has low ecological & ornithological worth, when considered against nationally protected species or designated areas, there is no conflict between the proposed development and policies at National, Regional or Local levels.

The proposal would not conflict with any current or emerging national, regional or local policies or plans.

6. ARCHAEOLOGY AND CULTURAL HERITAGE

NHDC

Development Plan

Policy 16 - Areas of Archaeological Significance and other Archaeological Areas

For Archaeological Areas, the Council may require a preliminary evaluation of any potential archaeological remains before deciding to permit or to refuse development proposals. For Areas of Archaeological Significance, a preliminary evaluation will be required as part of the application for development proposals which could disturb any possible archaeological remains. To assess the archaeological value of specific sites, the Council will seek expert advice.

If the site is judged to be nationally important, and the remains should be left undisturbed, the Council will normally refuse development proposals which adversely affect the site or its setting.

On other sites, the Council may permit development proposals with conditions and/or a formal or informal agreement, depending on the archaeological value, to provide:

- (i) an excavation before development; and/or
- (ii) facilities and an agreed period of time for access to the site for an investigation and/or for 'observation' of the groundworks as development progresses by someone appointed by the Council; and/or
- (iii) other measures as necessary; and/or
- (iv) a contribution from the developer towards the funding of any relevant investigation.

Policy 16 Justification - Areas of Archaeological Significance and other Archaeological Areas

Historic remains, early settlements and a pattern of ancient routes and Roman roads give the District a particularly rich heritage of known and suspected archaeological areas. Some of the most important sites are scheduled as Ancient Monuments by the Secretary of State for the Environment. These are defined as of National Importance and require his consent for works under the Ancient Monuments and Archaeological Areas Act 1979.

Development proposals are potential threats to all early remains. Therefore, the need is to preserve the most important sites and to make as accurate and

comprehensive a record as possible of other areas before the remains are destroyed. In this way, the most significant are kept for the benefit of present and future generations while the records of the other areas help build an understanding of the past.

Recent efforts have brought together developer and archaeological interests, and a Code of Practice (revised 1988) has been published. A further initiative, in common with many other parts of the country, has been a welcome increase in archaeological investigations in the County. The Council commends these initiatives but wishes to clearly indicate its level of concern about specific areas in North Hertfordshire.

Structure Plan

The Structure Plan incorporates archaeological considerations in Policy 38.

POLICY 38 CRITICAL CAPITAL AND OTHER IMPORTANT ENVIRONMENTAL ASSETS

Critical Capital and other important environmental assets as listed below will be given protection from development or other proposals which would cause loss, permanent damage or significant and irreversible change to those particular characteristics and features that define their special quality. The degree of protection given will be appropriate to status, according to their international, national or local importance.

The maintenance and enhancement, where appropriate, of these assets will be encouraged.

- vii) Scheduled Ancient Monuments and other archaeological remains of both national and more local importance, and their setting;
- viii) Listed buildings and their settings and other buildings of architectural, archaeological or historic merit;
- ix) Conservation Areas;

Regional Planning Guidance

The RPG 6 includes two policies relevant to cultural heritage:

Policy 37: General management principles for conserving and enhancing the natural, built and historic environment - which focuses on conservation and enhancement of the important aspects of East Anglia's natural, built and historic environment.

Policy 40: Conservation of East Anglia's built and historic environment relates to protection of the built and historic heritage, respects local character and distinctiveness, by conserving and maintaining historic and archaeological resources, and by ensuring that new development respects and enhances local character.

Conclusion

The relevant planning policy and material considerations are striving to preserve the features of historic or cultural worth. The Environmental Assessment process has determined that the construction of these turbines will not have a significant impact on the cultural and historic worth of these features nor will it significantly impact on any of their settings.

Therefore this application complies with all of the policy outlined within this section.

7. NOISE

NHDC

Development Plan

Draft Local Development Plan

It is not practical to try and provide absolute protection for existing residents' and occupiers' current levels of amenity. Instead, we need to try and ensure that any harm a development does have is kept to a tolerable level.

There are two ways this may occur. Either the development can incorporate measures to reduce the effect it has, or it can fund works off site to reduce the impact on those affected by it. This latter course of action may be appropriate for development such as the expansion of airfields, where there will inevitably be an increase in noise, but it may be possible to provide sound protection to those buildings affected by that noise.

The policy also covers the converse situation, where there is an existing use which has an adverse impact on a proposed development site. That proposed development will need to show that satisfactory levels of amenity will be achieved. This will need to take into account the nature of the development - for example, homes proposed in a noisy area will need more protection than a factory would in the same area.

Proposed policy wording

We will permit development proposals which do not cause unacceptable harm to the amenity of existing residents, occupiers and surrounding land. Such harm may arise from many sources, including (but not limited to):

- 1. traffic generation;**
- 2. noise;**
- 3. overlooking;**
- 4. pollution (including light pollution); and**
- 5. overbearing.**

Where such harm would be caused, we may permit development if measures are included to mitigate the harm to an acceptable level. Where the amenity of proposed developments would be affected by an existing use, the development will need to incorporate measures to mitigate the harm to an acceptable level.

Structure Plan

The Structure Plan does not include any policies specifically relating to noise.

Regional Planning Guidance

The RPG 6 includes two relevant policies:

Policy 37: General management principles for conserving and enhancing the natural, built and historic environment - which includes the statement that planning should provide effective environmental protection by integrating a site based approach with a more broadly based concern for noise pollution.

Policy 60: Renewable energy states that account should be taken of the land use and environmental implications of renewable energy schemes.

National Planning Guidance

At a national level, Government has published two policy documents that relate to noise from wind energy developments. PPG24 Planning and Noise considers the noise implications generally of land use and development and PPS22 Renewable Energy which considers issues associated with renewable energy generation, including noise.

Planning Policy Guidance 24 Planning and Noise acknowledges that much necessary development will generate noise and that whilst LA's must ensure that they do not cause an unacceptable degree of disturbance, unjustifiable obstacles should not be put in the way of such development. In addition, PPG24 also includes guidance on locating noise sensitive development in an already noisy environment.

Planning Policy Statement 22 Renewable Energy is the principle national planning policy guidance relevant to wind energy developments. It states that wind turbines are generally quiet in operation, with noise levels well below those generated by a wide range of other sources including some forms of road traffic. PPS22 identifies that the methodology set out in the ETSU report *The Assessment and Rating of Noise from Wind Farms* produced for the Department of Trade and Industry (DTI) in 1997 should be used to assess the noise from the wind energy development.

The Assessment and Rating of Noise from Wind Farms (ETSU-R-97) presents the recommendations of the Working Group on Noise from Wind Turbines which was established by the DTI in 1993. This document describes a framework for the measurement of noise from wind turbines and includes recommendations for noise limits derived from existing standards and guidance for noise emissions from other sources.

Conclusion

The noise assessment reported in the ES demonstrates that would be no materially adverse impact on residential amenity due to the operation of the wind turbines. As such the development would not conflict with policies. In conclusion the results of the noise prediction assessment indicate that there would be no materially adverse impact of the development on the noise levels experienced at sensitive receptors in the vicinity of the proposed development.

8. AIR QUALITY

NHDC

Local Development Plan

The local plan includes no specific air quality policies.

Structure Plan

The structure plan for Hertfordshire includes no specific air quality policies.

Regional Planning Guidance

The RPG 6 includes one policy specifically relating to air quality, **Policy 51: Air Quality** which states that LPA's should seek to ensure that the land-use planning system makes an appropriate contribution to the achievement of national air quality objectives and consider air quality amongst other material consideration in the planning process.

Conclusion

This application improves air quality by annually directly preventing the emission of:

- 15,300 tonnes of carbon dioxide
- 190 tonnes of sulphur dioxide
- 57 tonnes of nitrogen oxides

This development does not compromise the air quality within the district, and in the long term has the potential to assist with the quality of the atmosphere on a local, national and international level.

9. BUSINESS, AGRICULTURAL AND ECONOMIC DEVELOPMENT

NHDC

Local Development Framework

The policy deals with three specific areas. First, it allows farm diversification schemes where these will be of genuine benefit to the host farm. Secondly, it seeks to ensure that the best and most versatile agricultural land is not lost to other uses. Finally, it deals with the visual impacts arising from the sale of small plots in former agricultural areas.

The policy does not cover the issue of agricultural workers' dwellings, as this is now explicitly considered in national policy (PPS7).

Preferred policy wording

We will permit development proposals for farm diversification schemes where the scheme is financially subordinate to an existing farm unit and the proposed use is appropriate for a rural area.

On land in the countryside capable of being used for agriculture or forestry, we will permit development proposals acceptable in rural areas unless the land involved is classified as Grade 1, 2 or 3a agricultural land, in which case an exceptional case would need to be shown that the need for development and lack of suitable alternative sites outweighed the harm caused by the loss of the agricultural land.

Where land ceases to be used for agriculture and allowed to become unsightly, in order to ensure there is not unacceptable harm to local amenity, we may:

- 1) revoke permitted development rights;**
- 2) use our powers under s.215 of the Town and Country Planning Act; and/or**
- 3) use our compulsory purchase powers.**

Structure Plan

The structure plan includes one policy that relate to this development in the context of business and economic development:

POLICY 18: RURAL ECONOMY

Appropriate development, including farm diversification, will be encouraged within rural areas under the terms of PPG7 with a view to sustaining the rural economy, and in particular the viability of farm holdings. Development involving fragmentation of farm holdings or other impairment of farm

economics and management will be resisted in the absence of compensating advantages to the rural economy.

Regional Plan

The RPG includes various policies that relate to this development in the context of business and economic development:

- **Policy 48: Landscape & Biodiversity of Farmland**, requests that LPA's should seek to promote agri-environment measures to help maintain and enhance the landscape and biodiversity of farmland.
- **Policy 49: Protection of the Best and most Versatile Agricultural Land** which seeks to protect this land from irreversible development.
- **Policy 50: Farm Related Development** seeks that policy's need to accommodate the balance between the economic needs of agricultural and protecting the development of the countryside.

National Planning Guidance

At a national level, there are a number of pieces of legislation relating to the effect of this development on business and economic development. The most relevant is PPS7.

PPS7 Sustainable Development in the Countryside states that when determining planning applications for development in the countryside, LPAs should support development that delivers diverse and sustainable farming enterprises and support other countryside based enterprises and activities that contribute to rural economies. In particular they should be supportive of well conceived farm diversification schemes for business purposes that contribute to sustainable development objectives, whilst having regard to the amenity of nearby residents that may be affected by new types of on-farm development. PPS7 also states that the presence of best and most versatile agricultural land (grades 1-3a of the Agricultural Land Classification) should be taken into account when determining planning applications.

Conclusion

The proposed development involves the installation of 3 wind turbines on agricultural land. This development will not impinge the agricultural worth of the site, but can be considered a means of diversification to support the economic stability of the farming industry. The location of the development and the resulting diversification from historic agricultural practices are supported by the policies from the Local Plan and the Structure Plan.

10. CONCLUSIONS

1. This Planning Statement has outlined the policy framework against which the proposed wind turbine scheme should be judged. It considers relevant Planning Policy on a National, Regional, County and Local level in relation to each issue. It provides a comprehensive summary of the Government's support for renewable energy as evidenced by Planning Policy Guidance Notes and Statements, the Energy White Paper and in particular by the Government's targets of achieving 15% of electricity generation from renewables by 2015 and the aspiration of achieving 20% by 2020.
2. This scheme would provide 6 MW of installed capacity and would provide electricity for around 4,000 households, depending on the annual energy consumption of the homes. Each year the proposed 3 turbines will save the emission of 16,340 tonnes of carbon dioxide, 190 tonnes of sulphur dioxide, 75 tonnes of nitrogen oxides.
3. Policies in place which support the installation of renewable energy include Policy 60 from the Regional Planning Guidance, Policy 54 from the Structure Plan and the policy from the Local Development Framework Plan.
4. National guidance from PPS7 and PPS22 also support the application. The 2006 Energy Review Report highlights the need for a secure, diverse, energy supply in the UK which should include renewables.
5. The Environmental Statement has identified a number of effects arising from the construction and operation of the turbines:
6. A landscape and visual impact assessment was undertaken. This study assessed the scale of the possible visual impact according to the sensitivity of the viewing point and the distance from the development. In combining the average visual impact of moderate and the average landscape impact of minor. It is concluded that the overall landscape and visual impact is moderate. It is relevant that the further a view point is away from the site the more likely its view of the development will be effected by weather e.g. mist, fog & cloud. Only on a clear day would a view of the turbines be visible from these points.
7. The site is designated Green Belt and analysis concludes that the Green Belt objectives are not compromised by the wind turbines.
8. The ecological and ornithological impact through this development has also been assessed and concludes the impacts are insignificant.
9. There should be no impact on groundwater or the underlying aquifer and the development will not increase flood risk; the reduction of flood storage capacity will be of negligible significance.

10. The reduction in greenhouse gas emissions prevented by the development would have a beneficial effect.
11. The cultural heritage has been assessed there is no direct archaeological impact that can be predicted. The intended oversight of excavations leads to a conclusion that the archaeological impact is not significant.
12. The independent noise assessment concludes that the predicted wind turbine noise levels at all residential locations are below the night and day noise limits, under all conditions. Therefore there potential noise from the development is of negligible significance.
13. Neither the Civil Aviation Authority nor local commercial airports/fields have raised any concerns about the proposal following consultation, which indicates that the scheme is not considered a threat to radar/aircraft within the vicinity. There have been no concerns raised by the Ministry of Defence.
14. Residential amenity is safeguarded from the potential impacts of shadow flicker and interference to televisions and radios by the proposed mitigation measures.
15. Socio-economic benefits have been considered and show that this proposal would have no impact on the employment mix in the surrounding areas and would only occupy a small percentage of the whole of the farming estate. Therefore the impact of this development would be insignificant.
16. The Local Development Plan supports the provision of wind energy developments where any adverse effects are shown to be acceptable. Landscape Assessment undertaken on behalf of Hertfordshire County Council has identified this area as being easily able to assimilate small groups (2-12) of turbines. It has been clearly demonstrated that the proposed development is in a highly suitable location for wind energy, and that the need for renewable energy outweighs the predominantly negligible local environmental effects.
17. This Planning Statement has assessed each of the potential effects of the proposed development against the relevant policies and other material considerations